

INFORMATION TECHNOLOGY PROGRAMS

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SECTION 3

INFORMATION TECHNOLOGY PROGRAMS

Technology Overview

Purpose

und 104, Information Technology, was established in FY 1995 to strengthen centralized management of available resources by consolidating major Information Technology (IT) projects in one fund. Based on the 1994 Information Technology (ITAG) study, this fund was created to account for spending by project and is managed centrally by the Department of Information Technology. Historically, the E-911 Emergency Telephone Service Fee, a General Fund transfer, the State Technology Trust Fund, and interest earnings are sources for investment in Information Technology projects. However, in FY 2001, the E-911 Emergency Telephone Service Fee revenue and related project expenses were moved to Fund 120, E-911 to satisfy a state legislative requirement that E-911 revenues and expenditures be accounted separately.

The County's technology strategy has several key elements: provide an adequate technology infrastructure for agencies in making quality operational improvements; redesign existing business processes with technology to achieve large-scale improvements in service quality and achieve administrative efficiencies; and promote the use of technology in enabling government services without "doors, walls or clocks". The County's long-term commitment to provide quality customer service through the effective use of technology is manifested in service enhancements; improved access to services electronically, expedited response to citizen inquiries, improved operational efficiencies, better information for management decisions, and increased performance capabilities.

FY 2010 Initiatives

In FY 2010, funding of \$9.5 million, which includes a General Fund transfer of \$7.4 million, interest income of \$1.1 million, and \$1 million from the County's Cable Fund is provided to meet contractual obligations and complete planned phases of existing IT projects in Fund 104. These projects continue to meet one or multiple priorities established by the Senior Information Technology Steering Committee and include a mix of projects that provide benefits for both citizens and employees and adequately balance continuing initiatives with the need for maintaining and

strengthening the County's technology infrastructure. Although many initiatives meet more than one of the technology priorities, for narrative purposes below, projects have been grouped into only one priority area.

In accordance with the FY 2010 Budget Guidelines, funding requests for Fund 104 IT projects were limited to mandates and existing IT projects requiring a planned funding increment to meet contractual obligations and/or to complete a planned phase. During the annual Fund 104 submission process, agencies were advised that in response to significant budget constraints, no new IT initiatives would be considered; and that FY 2010 Fund 104 Funding requests must represent the planned budget increment supporting a previously approved phase required to continue the project deliverables. This change from prior years reflects significant limitations on the County's IT program based on the substantial projected budget shortfall in FY 2010.

In keeping with established procedures, a Project Review Team consisting of business and technical staff from the Department of Information Technology (DIT) and the Department of Management and Budget (DMB) evaluated all submissions requesting additional funding for clear alignment with project plans and anticipated deliverables. Projects were reviewed for continued alignment with project plans and anticipated deliverables. Projects were reviewed for continued alignment with project plans and anticipated deliverables, from both a business and a technical perspective, including whether the continued implementation of the project would realize proposed benefits. Benefits of the project were weighed against the cost and several risk factors, including potential unknowns related to expenses, changes in scope necessitated by new business drivers, technological relevance, operational transformation needs, project schedule viability, and the impact of not funding or otherwise delaying the project. Technical factors examined included alignment with County's technology architecture and standards, impact on existing County IT infrastructure, and availability of viable products and services. Also considered were factors such as the organizational experience with the solutions that support the project's business goals, and the availability of human resources both in DIT and the sponsoring agency to implement the project.



Funding Priorities

The Senior IT Steering Committee establishes the funding priorities for technology projects. Beginning in FY 2004, based on global changes in social and economic paradigm shifts, the new priorities shown below were adopted. The recommended IT investments meet the five key investment policy objectives shown below and are supported by the Senior IT Steering committee and ITPAC. A more detailed explanation of the projects within these requirements is provided within:

- Mandated Requirements: enacted by the Federal Government, Commonwealth of Virgin, Board of Supervisors, Court ordered or County regulation changes.
- Completion of Prior Investments: multi-year lease purchase, implements phase or completion of planned project.
- ➤ Enhanced County Security: homeland security, physical security, and information security and privacy.
- Improved Service and Efficiency: consolidate business practices; support more efficient government; optimize management and use of County assets and data; enhance systems to meet the expectations and needs of citizens; and promote service that can be provided through the Internet and e-government.
- Maintaining a Current and Supportable Technology Infrastructure: consistent and reliable hardware, software and communications infrastructure; ensure that citizens, businesses and County employees have appropriate access to information and services.

The five investment policy objectives relate to the County's continuing focus on making access to government services more reliable, secure, and efficient. The projects on the following pages are supported and will receive additional funding in FY 2010. The established priorities for IT projects for FY 2010 are summarized as follows:

PRIORITY	FY 2010 ADVERTISED FUNDING
Completion of Prior Investments	\$0.3 million
Enhanced County Security	\$3.9 million
Maintaining a Current and Supportable Technology Infrastructure	\$5.3 million
TOTAL	\$9.5 million

Completion of Prior Investments - \$0.3 million

The County's IT program focuses on using technology as an essential tool to enable cost-effective delivery of services, and continues to stress the need to build reliable, supportable projects in a timely manner. Many projects funded can be completed within that fiscal year, while others are multi-phase projects that require more than one year of funding.

In FY 2010 funding of \$182,000 is provided to complete installation of electronic way finding for the Fairfax County Courthouse. The electronic way-finding system displays court dockets on large monitors strategically placed near courtrooms. The system scrolls through defendants' names and courtroom assignments with the objective of providing citizens summoned to court an efficient way to locate their courtroom and reduce the congestion and confusion experienced by the public on the morning their court session is scheduled. Following successful implementation of General District and Circuit Court dockets (as part of the Courtroom Technology Pilot project), the final phase involves installation of electronic docket displays in strategically located public areas and the Juvenile and Domestic Relations District Court (upon their relocation to the new courthouse). This project seeks to improve citizens' access, internally and externally, to the Courts and allows all three Courts to share common resources while providing flexibility and adaptability to incorporate future changes in technology and court processes.

In FY 2010 Funding of \$150,000 is provided for continued support of the County's planned on-going maintenance of essential Geographic Information System (GIS) data. FY 2010 funding represents year three of a four year planned initiative to update the County's planimetric data. This project is jointly funded by the Department of Public Works and Environmental Services (DPWES) and Fund 104. Through a series of complex geospatial transformations the raw imagery, taken from aerial imagery flown by the state, will be converted to GIS data available to many County agencies including: Police, Fire and Rescue, the Departments of Transportation, Housing and Community Development, Public Works and Environmental Services, Planning and Zoning, and Tax Administration. The project includes new planimetric impervious surface features including: driveways, building footprints, streams, sidewalks, pools, edges and roads and centerlines, critically needed by key agencies such as DPWES (Stormwater) and by Public Safety.



Enhanced County Security - \$3.9 million

Ensuring the security of the County's IT investments and information assets is of primary importance to the Department of Information Technology. Through many projects and initiatives, efforts are focused on the security of various levels of County data, from email to homeland security measures. During FY 2010, the County will continue to implement a multi-faceted approach to securing County data and assets.

Funding of \$1,835,791 is provided in FY 2010 for the Fire Department's portion of the CAD/RMS shared and contractual milestone payments to continue the integration of Fire Records Management System (FRMS) and fire tactical incident support functions with the new CAD/RMS as part of the Public Safety Architecture Modernization initiative. The funding supports continued implementation of tactical incident applications, and integration of Fire Records Management System (FRMS) modules for personnel, equipment and buildings, as well as the capability to manage detailed inventory of FRD's equipment assets, staff resources, response plans, and apparatus assignments. Funding is critical to the overall Public Safety CAD/RMS project and ensures a unified technology platform across public safety agencies.

FY 2010 funding of \$1,224,691 is provided for the continuation of a multi-phase effort to implement a modern, comprehensive Law Enforcement Records Management System (ILEADS) to replace the existing Police Department array of disparate legacy systems. FY 2010 funding includes Police Department's portion of 911 CAD/RMS shared and contractual milestone payments to continue the implementation of a modern Police Records Management System (ILEADS) as part of the overall Public Safety Architecture Modernization initiative. The new system will improve the Police Department's ability in prevention, response, case management, and situational analysis relating to the safety and property of County residents. Intelligence led policing, improved criminal justice, and overall strategic public safety resource deployment will be improved upon implementation. The system will enable improved analysis and aid in identifying trends, and assist in staffing decisions and monitoring departmental effectiveness. The ILEADS system will integrate with the Computer Aided Dispatch (CAD) system in the Department of Public Safety Communications (911 Center), ensuring a unified technology platform to facilitate the seamless sharing of processes and data across public safety functions and leverages available technologies.

Funding of \$781,901 is provided in FY 2010 for the sixth year of a seven year annual lease-purchase payment for the Public Service Radio System network infrastructure. The project replaced a 20 year old Public Service Communications System, which provided two-way radio communications for all County non-public safety agencies, as well as the Fairfax County Public Schools Transportation Department (school buses), FASTRAN and Fairfax Water, with updated technology that meets the needs of user agencies. The system provides call processing capacity and area coverage to more than 90 percent of the area within the jurisdictional boundaries of Fairfax County. The new network eliminates two zones within the County and provides seamless coverage on one system. Based on a portion of project costs, derived from the number of radios users operating on the system, \$1,272,088 will be recovered from Fairfax County Public Schools and Fairfax Water in FY 2010.

Maintain a Current and Supportable Technology Infrastructure – \$5.3 million

In an ever changing technical environment, maintaining a current and supportable technology environment is a challenge that must be continually addressed to ensure performance, operability, security and integrity. The County's technological improvement strategy strives to balance business needs that require technology investments with the desire to adopt contemporary but relevant and supportable technology industry trends, as well as the ability to leverage existing infrastructure. Projects funded in FY 2010 support the goal of continuing to update and strengthen the technology foundation where practical, and ensure that residents, the business community and County staff have appropriate and reliable access to information and services.

Funding of \$3,156,293 will continue FY 2010 support to the Public Safety Architecture Modernization Project for implementing common technology infrastructure needs of the Computer Aided Dispatch (CAD) and Public Safety Records Management Systems (RMS) replacing the legacy CAD, Police RMS and Fire and Rescue RMS systems. The stakeholders include the Department of Public Safety Communications (DPSC), Police Department, Fire and Rescue Department, and Office of the Sheriff for case management and incident reporting. FY 2010 funding supports shared milestones, performance bond, commercial wireless broadband, and staff augmentation support. The project will implement an integrated public safety information platform enabling data sharing across functional areas of key public safety agencies for improved collaboration and interoperability.



Funding of \$2,100,000 (\$1,000,000 of which is funded through the County's Cable Fund), is included in FY 2010 to continue implementation of the multi-year Telecommunication Modernization Project. This initiative is designed to replace disparate telephone systems throughout the County with a contemporary telecommunication platform that includes functionality to integrate voice with data capabilities such as e-mail, other messaging systems and CRM, streamline business processes, consolidate use of telecommunications facilities, enhance system operational efficiency, and reduce overall support costs. An additional core benefit is the use of distributed telecommunications applications across the County's enterprise fiber network (I-Net). The new voice communications platform also provides secure communications to support the needs of

Telework, as well as the telecommunications infrastructure to serves the communications needs of County agencies. The project further advances service delivery to citizens, while maintaining flexibility to adopt future technologies with a minimal need for new spending.

Funding of \$50,000 is included in FY 2010 to provide for continuing information technology training and certification in recognition of the challenges associated with maintaining skills at the pace of technological changes and to ensure that the rate of change in information technology does not out-pace the County's ability to maintain proficiency. As the County's workforce becomes increasingly dependent on information technology, training support has become more essential.

3.1 Information Technology Projects

FY 2010 funding of \$9.5 million is included for initiatives that meet the priorities established by the Senior Information Technology Steering Committee. The Senior IT Steering Committee and the Information Technology Policy Advisory Committee (ITPAC) endorse strategic concepts for improved efficiency, effectiveness, and service delivery countywide. The Senior IT Steering Committee and ITPAC were briefed by DIT and informed that the IT modernization program received 17 requests totaling over \$27.9 million for FY 2010 Fund 104 consideration. Of this, 8 initiatives totaling \$9.5 million were recommended for funding and included in the FY 2010 Adopted Budget. Public Safety initiatives totaling \$4,304,000 million are included in Fund 120 (E-911).

The chart on the following page provides a summary of the IT Project in Fund 104 and Fund 120 modernization dollars since FY 2006. The County's IT program continues to

address the need for building and maintaining a reliable, scalable technology foundation that can support IT projects to improve the effectiveness and efficiency of County services. Although investment dollars are currently constrained, it has been highly recommended that the County not fall substantially behind in its IT investment targets and goals which are focused on using technology as an essential tool to enable cost effective delivery of government services. To date the County's investments in technology have allowed Fairfax County to serve a growing population without significant growth in staff positions that would be otherwise necessary just to provide basic services. A more detailed explanation of these projects is provided within. The five investment policy objectives relate to the County's continuing focus on making access to government services more reliable, secure, and efficient.





Budget ID Number	PROJECT TILE	FY2010 STATUS	FY 2006 ADOPTED	FY 2007 ADOPTED	FY 2008 ADOPTED	FY 2009 ADOPTED	FY 2009 REVISED	FY 2010 ADOPTED
FUND 120								
IT0001	Public Safety Communications Network	On-going	8,497,796	5,908,579	7,233,079	7,984,403	15,286,847	4,304,000
	TOTAL FUND 120		8,497,796	5,908,579	7,233,079	7,984,403	15,286,847	4,304,000
FUND 104								
IT0002	Human Services Information Systems	On-going	60,000	0	75,000	0	188,393	0
IT0004	Geographic Information System (GIS)	On-going	491,180	411,000	386,680	158,840	1,362,787	150,000
IT0006	Tax / Revenue Administration	On-going	866,930	0	0	0	420,744	0
IT0008	Library Projects	Complete	502,336	0	0	0	0	0
IT0010	Information Technology Training	On-going	300,000	200,000	250,000	100,000	130,970	50,000
IT0011	Document Management and Imaging	On-going	1,493,410	1,351,629	1,145,000	0	2,698,820	0
IT0015	Health Management Information	On-going	0	0	280,785	0	314,717	0
IT0022	Tactical Initiatives	On-going	850,000	276,539	96,648	0	3,963,606	0
IT0024	E government	On-going	500,000	475,000	275,000	208,190	1,092,930	0
IT0025	Adult Detention Center Information	Complete	697,160	0	0	0	302,798	0
IT0031	MS Office Suite Migration	On-going	0	0	0	0	29,715	0
IT0039	Court Modernization Projects	On-going	350,000	0	0	988,960	5,423,813	0
IT0043	Human Resource Management System	Retired	0	0	0	0	289,921	0
IT0048	Incident Reporting and Training System	On-going	0	0	0	416,691	1,035,210	1,835,791
IT0050	Public Service Communications Replc.	On-going	491,864	588,517	632,166	663,223	2,816,244	781,901
IT0054	SYNAPS	On-going	0	0	500,000	0	510,802	0
IT0055	Fairfax Inspections Database Online	On-going	520,775	285,376	351,000	0	1,431,980	0
IT0056	Pilot Crtm Technologies-Wayfinding	On-going	0	0	0	0	15,971	182,000
IT0058	Remote Access	On-going	50,000	100,000	0	0	45,610	0
IT0059	Child Care Technology Systems	On-going	0	0	194,165	0	231,106	0
IT0060	Telecommunications Modernization	On-going	3,300,000	4,495,000	1,757,461	1,534,750	2,835,885	2,100,000
IT0061	Information Technology Security	On-going	450,000	225,000	244,160	300,752	346,441	0
IT0062	Police Records Management/ILEADS	On-going	300,000	500,000	2,200,000	4,147,000	6,447,193	1,224,691
IT0063	Facility Space Modernization	Complete	99,208	0	0	0	14,388	0
IT0064	Proffer Database & Status System	Deferred	450,168	137,715	0	0	0	0
IT0065	Facility Maintenance Management	On-going	548,750	0	392,000	188,218	907,054	0
IT0066	Personal Property Tax System	Complete	0	0	0	0	3,606	0
IT0067	Stormwater Maintenance Management	On-going	335,993	0	0	0	292,958	0
IT0068	Home occupation Permitting System	Complete		46,375	0	0	0	0
IT0069	Integrated Housing Management	On-going	160,000	222,500	0	0	196,174	0
IT0071	E-Summons and Court Scheduling	Deferred	405,000	552,500	0	200,000	76,929	0
IT0072	Citizen Relationship Management	On-going	0	500,000	250,000	300,000	433,318	0
IT0073	UDIS Replacement	Complete	0	820,000	0	0	129,215	0
IT0074	Data Analysis Reporting Tool	Complete	0	238,000	450,000	0	28,723	0
IT0075	Participant Registration System	Deferred	0	300,000	0	0	0	0
IT0076	Interactive Web Intake Program Enh.	Complete	0	130,000	0	0	5,000	0
IT0077	Land Development Industry Enh.	Deferred	0	250,800	150,000	0	0	0
IT0078	Courthouse Expansion Technology	On-going	0	1,730,000	0	500,000	2,137,261	0
IT0079	Legacy System Replacement	On-going	0	0	800,000	7,000,000	15,594,455	0
IT0080	RSIS	Complete	0	0	217,200	0	217,200	0
IT0081	Housing Management Software Upgrade	Complete	0	0	125,000	0	125,000	0
IT0082	Land Use Information Accessibility	On-going	0		300,000	0	279,574	0
IT0083	Public Safety Architecture Modernization	On-going	0	0	2,687,750	1,892,458	3,920,772	3,156,293
IT0085	Loan Processing System Replacement	On-going	0	0	0	126,000	126,000	0
IT0086	Fire Station Alerting	On-going	0	0	0	200,067	1,340,033	0
IT0087	ParkNet Security Upgrade	On-going	0	0	0	179,571	179,571	0
	TOTAL FUND 104		13,222,774	13,835,951	13,760,015	19,104,720	57,942,887	9,480,676
	GRAND TOTAL: IT PROJECTS		21,720,570	19,744,530	\$20,993,094	26,337,799	73,229,734	13,784,676



3.2 Public Safety

IT0001 Public Safety Communications Network/Systems

Project Description

This project provides for continued support and maintenance of the Department of Public Safety Communications (DPSC) network, radio and mobile communication components. The network's component systems are vital for ensuring immediate and systematic response to emergencies, and replacement and enhancement is necessary to maintain performance, availability, reliability, and capacity to meet growing County population and demand for public safety services. The Public Safety Communication Network (PSCN) supports emergency communications of the Police, Fire and Rescue, and Sheriff's departments. This includes public safety call taking (E-911, Cellular E-911, non-emergency), dispatching, and all affiliated communications support. Two of the major technologies utilized are a Computer Aided Dispatch (CAD) system with an integrated mobile data communications component and a wireless digital radio network for voice communications. The mobile data communications capability facilitates the dispatch of resources with minimal voice communications, provides field units direct access to local, state and national databases, and allows continuous contact with DPSC. As needed, this project provides funding for maintenance of the legacy systems and the mobile data communications component. Maintenance and support resources for legacy systems funded from 911 fees through Fund 120 are provided and ensure continued reliable operation of these critical systems.

These legacy systems and components will be supported by the project while a parallel project, IT0083, Public Safety Architecture Modernization, provides the underlying infrastructure components and shared capabilities required for the implementation of a new integrated, interoperable Computer Aided Dispatch that will enable seamless sharing of processes and data across public safety functions and leverages available technologies.

Project Goals

The goal of this project is to ensure immediate and systematic response to emergencies, and replacement and maintain performance, availability, reliability, and capacity for

growth due to increase in County population and demand for public safety services.

Progress to Date

Fairfax County migrated to the new digital radio network in FY 2000 to accommodate growing public safety voice communications requirements and the remedy performance, coverage, fragmentation, and reliability problems associated with an aging, technologically obsolete system at the very end of its sustainable life cycle. Deficiencies in the old system severely impeded critical communications and safety in emergency situations. The new trunked wireless digital voice communications system consolidates all County public safety voice communication and is designed to address coverage, reliability, and operations limitations of the old system used by public safety agencies in the County.

Project Budget

FY 2010 funding of \$1,200,000 is included in Fund 120 for the third year of a five-year replacement cycle for Mobile Computer Terminals (MCTs). Both the two-way radios and the MCTs have useful life of five years. In FY 2009, the County began to update its Public Safety Radio System to a newer technology platform. FY 2010 funding of \$3,104,000 is provided in Fund 120 for continued support of updating the Public Safety and Transportation Operations Center (PSTOC). The upgrade will transition the radio system to an IP-based network, enhance the existing outdoor and inbuilding radio coverage of the current system, allow the use of more up to date radio dispatch consoles, and relocate the current radio system's central controllers to the heavily secured PSTOC facility.

Return on Investment

The return on investment for this project is realized by the performance, productivity, and effectiveness of public safety services in Fairfax County. Replaced and upgraded technology for these systems is critical to the safety of the public and the public safety personnel they support.



IT0011.5 JDRC Electronic Records Management System

Project Description

Juvenile and Domestic Relations District Court plans to implement a multi-phase work-flow and electronic records management system to allow the Court to replace traditional paper-based case files and manual court case processes with electronic court case records and automated workflows for case processing and management. The system will be designed to facilitate information management and the sharing of documents, objects, and instructed data through the use of imaging, document management, records managements, workflow, electronic forms, and enterprise application integration (EIA) tools. This document management system, which will be developed using the Documentum Enterprise Content Management system, will allow the court to maintain its case records in electronic rather than paper format. The increasing volume of case records and the complex retention, confidentiality, and destruction criteria as mandated by the Virginia Code have severely impacted the court's ability to manage court documents. The Electronic Records Management System will convert new case records and retrieved existing case records to electronic format in order to substantially reduce the need to rely on paper documents to initiate services to the public.

Project Goals

An electronic document management system will provide improved security and integrity of records, reduce labor intensive and time consuming record retrieval and refilling processes, expedite workflow processes through an electronic workflow management system for court documents, provide simultaneous and instant access to court records, reduce costs associated with space and shelving for storage of paper documents, and provide a means of safeguarding documents with an electronic backup of court records.

Progress to Date

The first set of processes for Informal Hearing/Monitored Diversion was implemented at the end of the third quarter of FY 2006. Functionality enabled in this first implementation included electronic document storage in case file format, workflow, form creation, scanning/scanned data routing, and enablement of electronic signatures. A large portion of the baseline infrastructure was also built. The infrastructure houses the various environments for testing, training, acceptance, development and production.

Due to the nature of the workflow, the project will develop in functional segments. The functionality must be built on the processes from intake or pre-court through the public counter, docketing, the courtroom, and post-court. Specific functionality includes case creation, document creation, user ability to view case records electronically, scanning and imaging, expungement, public viewing, redaction and workflow. The user base will grow substantially; besides intake users presently utilizing the system, personnel will include the court clerk staff and public counter staff, judges, and the probation staff. The remainder of the user software licenses will be obtained, the remaining workstations will be updated and/or replaced, scanning in the courtrooms will be set-up and scanners will be added at additional locations around the county. An innovative training period to accommodate the large number of users and accommodate the diverse areas of duties will be planned.

Milestones:

- ➤ Initial Servers, Scanners, ePads, SCSI cards, extender cables procured
- User access set up for Pilot, Production, Acceptance, Testing, Scanning, and Training
- Acceptance testing for Informal Hearing/Monitored Diversion initial implementation completed successfully with incidents reported and fixes in place
- Successful completion of 5 scheduled 2 day training classes with a total of 40 users fully trained
- Successful implementation of processes for Informal Hearing and Monitored Diversion with use by intake officers, intake clerks and limited services staff
- Infrastructure to support application, docbases, scanning, etc. set-up (missing failover to another site in case of all server failure at the Government Center)
- Environments set-up for Acceptance, Test, Training, Production, and Scanning
- CYA software for data retrieval set-up, with 15 minutes scheduled back-ups taking place
- Successful deployment of hardware including desktops, monitors, scanners, and eSignature pads, for all presently activated users



- Successful deployment of software, including new County/JDRDC image, Adobe, and signature software loaded on users machines, and scanner software loaded on scanning workstations
- Creation of the ERMS lab (utilized for testing of the application and training sessions) which consists of 8 student workstations, one instructor workstation, a scanner and scanning workstation, and eSignature capabilities
- A Statement of Work to complete the requirements and design phase for the legal process portion of the system.

Project Budget

Due to FY 2010 budget constraints, \$900,000 from this project's existing balances was reallocated to IT0078-Courthouse Expansion Technology Project in order to

complete the technology roll out to the nine JDRC court-rooms, master control room, and secluded witness room in the new courthouse. Completion of the above will facilitate the Court's move to the new courthouse schedule for September 2009. The JDRDC ERMS project anticipates that the remaining \$900,000 will be sufficient to continue through FY 2010 with no further funding requested.

Return on Investment

Funding this project will reduce staff time spent locating missing files, and retrieving and re-filing records. It will reduce the physical storage space required for court records, avoiding the cost of leased space near the courthouse. It will expedite the response time to internal and external customers at the Records and Fines and Costs counters, and it will provide easier and more efficient public access to court records. Planned back-up systems will provide necessary data security.

IT0039 Circuit Court Technology

The Fairfax County Circuit Court is nationally recognized for itsdelivery of outstanding public service and continues to actively pursue state of the art technological solutions to improve customer support and operational efficiencies. This project covers multiple facets of Circuit Court operations and receives funding through the Commonwealth of Virginia's Technology Trust fund.

Project Description

Court Automated Recording System (CARS) - The Clerk's Office of the Fairfax Circuit Court is responsible for providing Fairfax County citizens with reliable, timely, and accessible public records. As custodian of historical land records, the Land Records, Public and Services and Probate sections of the Circuit Court recognized a critical need to preserve deteriorating paper documents, to ensure their availability for future generations. This project was initiated in an effort to preserve these documents and streamline the methods used to record, maintain, store, and view them. More than 35 million Land Record, Public Service and Probate images, dating from 1742 to the present have been digitized, indexed and loaded into the Court Public Access Network (CPAN). CPAN is a web-based, online retrieval system that is available 24 hours a day, 7 days a week, with more than 2,000 subscribers located in twenty-six states and the District of Columbia. Subscribers include citizens, title examiners, law offices, mortgage companies, banks, the Commissioner of Accounts, and County agencies.

Case Management System (CMS) – The Court Modernization project began in 1997 with the County-initiated merger of the Circuit Court Judicial Operations agency with the Circuit Court and Records agency, to reduce administrative duties and expenses. At the time of the merger, the Clerk of Court and the Circuit Court Judges identified that a common, more robust case management system was essential for a successful merger of the two agencies. The current case management system (FullCourt) automates the process of how a case moves through the court system and includes; case initiation and indexing, docketing and related record keeping, scheduling, document generation and processing, calendaring, hearings, disposition, accounting functions, security, management and statistical reports. In 2006 an RFP was developed to replace the existing case management system, with a system which incorporated identified business processes and the latest developments in case management software, such as integrated Electronic filing and forms as well as document imaging and management. The RFP process was concluded in 2008 without an award.

Redaction – The Commonwealth of Virginia passed legislation mandating the Clerk of the Circuit Court to redact the social security number (SSN) from all images in Circuit Court automated systems that are viewable via secure remote access. The Circuit Court has identified nearly 37 million images currently online and viewable through the Court Public Access Network (CPAN), a subscription internet service. Additionally, FCC requires a Commercial-Off-The-



Shelf (COTS) software package with the capability to integrate into CARS for day-forward operations to remove SSN prior to final export of the new images into public view. Finally, in case future legislation is passed, the software must be capable of adding additional privacy requirements into the redaction process.

Project Goals

Circuit Court modernization initiatives in the Clerk of Court's technology program include:

- Expanded electronic filing of more than 100 land record document types
- Replacement of the 10 year old case management system with a fully integrated system providing civil and criminal processing, imaging and electronic filing capabilities
- > Redesign of the CPAN web capabilities
- Implementation of the Commonwealth's redaction leaislation for land records
- Development of an alternate site for CPAN access to provide additional security and continuity of operations
- ➤ Increase the number of courtrooms which use new technologies to facilitate remote testimonies, audio

and visual displays of evidence, integrated assisted listening and interpretation capabilities

Progress to Date

Past accomplishments include development and deployment of the Court's Land Records Recording System, including document imaging; implementation of the Court Public Access Network (CPAN) retrieval system, use of an automated jury management system to administer 45,000 potential jurors annually; deployment of a case management system to control the administration of the Court's judicial caseload; development and implementation of paperless probate processing; development and implementation of a streamlined marriage license process which utilizes scanners to import data from customers' operator licenses; and implementation of electronic docketing display directing public to the assigned courtroom.

Milestones:

CARS

- Digitized back-file images with associated indices and implemented web-based CPAN – 1999
- Scanned, indexed, and stored all land record documents for electronic processing – 2000
- Added non-deed document processes for indexing and storage (judgment abstract and notices, marriage licenses, financing statements) – 2000



Fairfax County Courthouse



- Redesigned processes to include automated cashiering and scanning capabilities to update the public record in a more efficient manner – 2001
- Expanded images and associated indices available on CPAN to 1742 – 2001
- ➤ Electronic filing prototype for mortgage releases using the ACH transfer of funds 2002
- ➤ Implemented Public Services cashiering system 2005
- ➤ Automated the administration of estates system 2006
- ➤ Incorporated the use of commercial credit cards for payment of fees and taxes 2007
- Creation and implementation of Electronic filing system, estimated completion FY 2010.
- Phases 2 and 3 of the Electronic Filing System (EFS) to enhance the system and expand document types – FY 2010
- ➤ Integration of redacted data and processes mandated by the legislature FY 2010
- Integrate with Identity Manager for single sing-on capabilities – FY 2010
- Integration of automated scanning in the marriage license application process for customers from nearby states – FY 2010

CMS

- Provided web-based availability of court information on CPAN – 2005
- ➤ Implemented electronic docketing display directing public to the assigned courtroom 2006
- Conducted demonstrations of case management systems recommended by the National Center of State Courts in preparation for the RFP – 2006
- The RFP process was concluded in 2008 without an award.

Redaction

- The project team developed RFP specifications for a contract to procure redaction products and services in order to comply with state mandates.
- Vendor selection process is currently underway. Demonstrations from selected vendors is planned for early FY 2010

Budget

It is anticipated that FY 2010 funding of \$739,000 from the Virginia State Technology Trust fund will continue to support Circuit Court technology projects.

Return on Investment

CARS provides immediate electronic access to CPAN for over 2,000 commercial customers. The system provides added functionality to search for and correct errors that occurred in documents recorded in the previous land records system. Additional benefits include enhanced retrieval and administration of Circuit Court records and an expedited transfer of information to the Department of Tax Administration, Geographic Information Systems and the Department of Public Works and Environmental Services.

For CMS, anticipated imaging and electronic filing enhancements will provide increased efficiencies in the processing of more than 22,000 civil and criminal case filings annually. Multiple parties will be able to access electronic case files simultaneously and file documents from their office or home, reducing the need to travel to the courthouse and provide 24/7 accessibility. Potential interfaces with other jurisdictions will allow the exchange of electronic documents and/or data and eliminate existing manual processes between jurisdictions.

The Redaction Project will enhance the security and integrity of CPAN by removing SSNs from public view. An added cost savings of the project will be the ability of the software to identify items that may be redacted by future legislative mandate without incurring additional reprocessing costs.

IT0048 Fire and Rescue Incident Reporting and Records Management Systems

Project Description

The Fire and Rescue Department's Incident Reporting and Records Management Project is part of a multi-system, multi-phase initiative called the Public Safety Architecture

Modernization project which will result in the replacement of the current CAD (Computer Aided Dispatch system), as well as legacy Fire and Police Records Management Systems (FRMS and PRMS), a Fire Tactical incident management system, and a field based electronic Patient Care



Reporting system (ePCRS). The overall Public Safety CAD/ RMS project ensures a unified technology platform across public safety agencies.

Project Goals

This project will integrate the Fire Records Management System (FRMS) and fire tactical incident support functions with the new CAD/RMS as part of the Public Safety Architecture Modernization initiative. Additionally, project goals include the implementation of a Fire Tactical incident applications, a field based electronic patient care reporting system, and integration of Fire Records Management System (FRMS) modules for personnel, equipment and buildings, as well as the capability to manage detailed inventory of FRD's equipment assets, staff resources, response plans, and apparatus assignments.

Progress to Date

The Electronic Patient Care Reporting System (ePCRS) which was successfully implemented in FY 2008 consists of the deployment of a tablet based computer system for all Fire and Rescue units. Patient treatment information is collected directly on the tablet PC while the crew members treat the injury/medical problem. The patient information is linked via secure wireless service to the electronic Patient Care Servers for direct storage. The process is fully HIPPA compliant. The system reduces the overall time required to complete the required reporting process through the elimination of duplicate processes and provides more accurate information for better recordkeeping. This system will enable the Fire and Rescue department to comply with the Commonwealth of Virginia's Office of Emergency Medical Services (OEMS) mandated emergency medical services (EMS) data reporting requirements. In addition, the information captured can be mined to assist the Fire and Rescue Department in both the strategic planning for future services and the tactical deployment of Emergency Medical units based on that information. Fire Records Management System installation and configuration is currently underway with a completion and go-live time frame of FY 2010.

Milestones:

- ➤ Implementation of ePCRS FY 2008
- Fire Records Management configuration and installation – FY 2009 – FY 2010
- Implementation of Fire Records Management FY 2010

Project Budget

Funding of \$1,835,791 is provided in FY 2010 for the Fire Department's portion of the CAD/RMS shared and contractual milestone payments to continue the integration of Fire Records Management System (FRMS) and fire tactical incident support functions with the new CAD/RMS as part of the Public Safety Architecture Modernization initiative. Funding is critical to the overall Public Safety CAD/RMS project and ensures a unified technology platform across public safety agencies.

Return on Investment

A unified public safety architecture consisting of a modern records management system, integrated with CAD and other public safety agencies management systems, will result in more cost effective public safety operations. This project ensures FRD's continued compliance with National Fire Protection Agency requirements, the Virginia EMS mandated reporting requirements, and will improve data management, statistical analysis, decision making capabilities, FRD's resource and apparatus standards, and improved operations.

The Electronic Patient Care Reporting System provides more timely and accurate tracking of patient transport information by creating more detailed patient treatment documents electronically with a tablet device directly interfaced with the current Computer Aided Dispatch system. With this system, billing information is readily, securely extracted, and electronically transmitted to the billing vendor which greatly improves the efficiency of billing and revenue collection. Patient care is enhanced through accurate documentation and information dissemination to the medical facility where the patient is transported. Furthermore, a reduction in the staff time required to complete patient care and incident reports provides units with a quicker "return to service" time.

Enhancements to the Fire Records Management System will consolidate personnel, training and apparatus records in a single system of record, eliminate several legacy applications, and provide a central business system for the Fire and Rescue Department. The overall Public Safety CAD/RMS system will provide significant efficiencies for public safety information and technology utilization. The systems have been consolidated under a single strategy with the various components interfaced when appropriate for a comprehensive view supporting incident response.



IT0056 Courtroom Technology - Electronic Way-Finding

Description

The electronic way finding system displays court dockets on large monitors strategically placed near courtrooms. The system scrolls through defendants' names and courtroom assignments and provides citizens summoned to court an efficient way to locate their courtroom. This system replaces an inefficient paper based system whereby each day court staff manually posted reams of printed court dockets on bulleting boards spread throughout the courthouse.

Project Goals

All three courts continue to maximize and share resources focused on providing citizens summoned to court an efficient way to locate their courtroom and reduce the congestion and confusion experienced by the public on the morning their court session is scheduled. This project seeks to improve citizen's access, internally and externally, to the Courts and allow all three Courts to share common resources while providing flexibility and adaptability to incorporate future changes in technology and court processes.

Milestones:

- Phase I Pilot General District Court (GDC) Traffic Dockets – Expanded to include GDC, Civil and Criminal Dockets – March 2005 – November 2005
- Phase II Add displays for Circuit Court Civil and Criminal combined dockets – November 2005

- Phase III add way finding at Main Entrance FY 2009
- Phase III additional Circuit Court for renovated wing – FY 2010
- Phase III additional GDC for renovated wing FY 2010
- Phase III add new displays for JDRC, third floor new and renovated – FY 2010

Budget

FY 2010 funding of \$182,000 is provided to complete installation of a unified electronic Way finding system for the Fairfax County Courthouse. Following successful implementation of Phase I and II (General District and Circuit Court as part of the Courtroom Technology Pilot project), Phase III involves installation of electronic docket displays in strategically located areas throughout the newly expanded and renovated courthouse and the Juvenile and Domestic Relations District Court (upon their relocation to the new courthouse).

Return on Investment

In implementing electronic way-finding, the objective continues to be on providing citizens summoned to court an efficient way to locate their courtrooms and reduce congestion and confusion experienced by the public. The primary benefit will be improved efficiencies, the facilitation of court processes, and services that provide a direct benefit to the citizens, businesses and employees that reside in Fairfax County and conduct business with the Courts.



Fairfax County General District Court – Traffic Dockets



IT0062 Police Records Management System - I/LEADS

Description

The goal of this project is to implement a modern, intelligent, comprehensive Law Enforcement Records Management System to replace the legacy police records management system. The new system will improve reliability, accuracy, quality of data, and will operate on the principles of "single point of data entry" and query. The I/LEADS System will be based upon proven technology derived from current industry and County standards. The system will expand the capacity of the Police Department, allowing it to better analyze – statistically and through spatial techniques – data on incidents and personnel. It will also aid in identifying trends, and assist in staffing decisions and monitoring departmental effectiveness. Intelligence led policing; improved criminal justice; and overall strategic public safety resource deployment will be improved upon implementation.

Project Goals

The new police records management application I/LEADS will integrate with the Computer Aided Dispatch (CAD) system in the Department of Public Safety Communications, ensuring a unified technology platform approach that seamlessly shares processes and data across public safety functions and leverages available technologies. The new Police Records Management System-I/LEADS increases the Police Department's ability to prevent, respond to, manage, and analyze situations that threaten the safety and property of citizens.

Progress to Date

An RFP for an integrated CAD and law enforcement records management solution was completed and a contract was signed in September 2007. Since the inception of the project the Police Department has had a team of police personnel who have been actively working with the project team in the development and testing of the Police Records Management System I/LEADS as part of the new integrated public safety modernization initiative. I/LEADS is scheduled to go live following implementation of the new CAD system. This implementation will be among the largest technology initiatives, and the most extensive records management upgrade for the Police Department.

Milestones:

 Data mapping and data conversion from the Old PRMS to (I/LEADS) – FY 2009

- Installation and configuration of software (ILEADS) FY 2009
- Acceptance testing and end-user training FY 2009
- ➤ Go Live to production FY 2010

Budget

FY 2010 funding of \$1,224,691 is provided for the continuation of a multi-phase effort to implement a comprehensive Police Records Management platform. FY 2010 request included Police Department's portion of CAD/RMS shared and contractual milestone payments to continue implementation of a modern, reliable and proven Police Records Management System (ILEADS) as part of the integrated Public Safety modernization initiative. Due to FY 2010 funding constraints, \$1,000,000 from the E-Summons Project's (IT0071) existing balances was reallocated at FY 2009 Third Quarter towards completion of this project. The E-summons project is deferred at this time.

Return on Investment

A unified public safety architecture consisting of a modern records management system, integrated with CAD and other public safety agencies management systems, will result in more cost effective public safety operations. This project will ultimately impact nearly all aspects of police work and police information collection, and link the through an integrated system with CAD. A modern system that assures accurate, timely, reliable and accessible information on events, County geography and Police information will permit the Police Department to efficiently act upon events, from initial response through tracking, investigation and reporting. Additionally, capture and storage of reliable and accessible data from the system will result in the ability to effectively address staffing crime analysis resource allocation, tactical planning and strategic planning. The new system will provide opportunities to increase effectiveness by eliminating redundant work and open up opportunities for information sharing and interoperability between law enforcement agencies. This is a significant tool in developing investigative leads, linking crimes across jurisdictional boundaries, and conducting crime analysis.



IT0071 Electronic Summons and Court Scheduling

Project Description

This project was designed as a joint effort between the Fairfax County General District Court (GDC) and the Fairfax County Police Department (FDCP) to develop automated solutions to streamline the traffic summons and court scheduling processes by managing court dockets in a manner that will minimize high and low periods of activity, provide judges and court personnel with a more predictable and manageable workload, and implement of a Electronic Summons application to automate the transfer of summons information from the scene to Police Department's Records Management and the District Court's case management systems.

Project Goals

Goals are to provide the public efficient and timely electronic access to cases to enhance the public's ability to utilize automated options for review of case information and payment of fines; and improve access to statistical information about the monthly summons issuance patterns to identify officers with heavy caseloads to manage court dockets more effectively therefore improving service to court users and the public. The Court Scheduling System was designed to streamline and improve management of traffic court dates between the Fairfax County General District Court and law enforcement agencies.

Progress to Date

Phase I

Court Scheduling System is substantially complete and in production. The system allows court administrators and the Police department to coordinate traffic court dates in order to level out and evenly distribute daily court dockets in the General District Court. Additional functionality was added to CSS to streamline officer court dates, and allow

the Fairfax County Police Department to enter criminal and juvenile cases court dates into the system. Work is underway to enable court users to manager court schedules for ticket writing groups external to Fairfax County.

Phase II

This phase consisted of the implementation of an electronic summons solution for traffic summons as part of the integrated CAD/RMS project. However, due to FY 2010 budget constraints the E-summons phase of this project has been deferred.

Project Budget

As part of the Fund 104 review process, the Police Department was asked to prioritize between their two Fund 104 Projects (ILEADS- Police Records Management System and E-summons) and placed ILEADS as a higher priority. Therefore at FY 2009 Third Quarter, \$1,000,000 from this project's existing balances was reallocated towards completion of ongoing work on the Police Department's new Records Management System – ILEADS (IT0062). The E-summons project is deferred at this time.

Return on Investment

Automated solutions allow for the reallocation of existing staff to positions that provide direct assistance to the public, ensure greater accuracy in capturing defendant information, eliminate data entry errors with potentially serious repercussions for defendant, allows faster ticketing processes that get officers back on the road more quickly, reduce overtime for officers waiting in court, reduce the frustration and time citizens have to wait in court for a hearing, provide more efficient use of Commonwealth's Attorneys and Deputy Sheriffs, as well as provide the public near real time electronic access to case Information.

IT0078 Courthouse Expansion Technology Project

Project Description

This project is engaged in the planning, design and implementation of modern courtroom technologies for fourteen new courtrooms constructed as part of the on-going Courthouse expansion efforts. These technologies include integrated and electronic evidence presentation, video conferencing capabilities to allow remote witness, remote judge, video arraignment and secluded witness, automated court reporting, assistive listening, electronic way-finding and docket display, and judges' control of the technolo-

gies from the bench. The courtroom technologies advance the recommendations provided from the working prototype project developed from the original Courthouse design master plan and supported by the County's affiliation with the Courtroom 21 Project of the College of William and Mary School of Law.

Project Goals

This project's goal is to modernize and implement up to date courtroom technologies as part of the overall court-



house expansion and renovation effort. The main objectives seek to improve citizens access, internally and externally, to the Courts, facilitate trials in the most effective and efficient means possible, allow for all three Courts to share common resources and provide for flexibility and adaptability to incorporate future changes in technology and court proceedings. Consistency and standardization between the three Courts is necessary to maintain efficient courtroom operations and optimize available resources.

Progress to Date

The Courtroom 5E High Technology Courtroom Prototype was completed in October of 2006. This project succeeds the completed prototype project by implementing modern courtroom technologies into 14 new courtrooms recently constructed as part of on-going courthouse expansion efforts. The installation and integration of the master courtroom technology plan was completed in January 2008. Completion of Phase II, technology roll out to five new courtrooms for Circuit Court and General District Court was accomplished in December 2008. Phase III includes the completion of nine new courtrooms, master control room, and secluded witness room for the Juvenile and Domestic Relations District Court. Phase III is currently underway and completion is planned for the fall of 2009 in order to facilitate JDRC's move to the new courthouse.

Milestones:

- Phase I complete Courtroom 5E prototype / cable cutting – Oct 2006
- Completion of the master courtroom technology plan/design for new / renovated courtroom – January 2008
- ➤ Phase II complete technology roll out to 5 new courtrooms for Circuit Court and GDC – Dec 2008
- Phase III Technology roll out of 9 new courtrooms, master control room and secluded witness room for the Juvenile and Domestic Relations Court – FY 2010
- Phase IV shelled courtrooms, estimated completion – FY 2010 – FY 2011

Project Budget

Due to serious FY 2010 budget constraints no new funds are provided for this project. However an agreement was reached with the Juvenile and Domestic Relations District Court (JDRC) to reallocate \$900,000 from the Court's Document Management project's existing balances to this project during FY 2009 Third Quarter Review, in order to complete the technology roll out to the nine JDRC courtroom, master control room, and secluded witness room in the new courthouse scheduled for September 2009.



Fairfax County Circuit Court - Courtroom 5J



Return on Investment

The primary benefit are improved efficiencies and the facilitation of court processes and services that will provide a direct impact to citizens, businesses, and employees. The main objectives are to improve citizens access, internally and externally, to the Courts; facilitate trials and hear-

ings in the most effective and efficient means possible; allow for all three Courts to share common resources and provide for flexibility and adaptability to incorporate future changes in technology and court proceedings; and allow the Courts to keep up with the growing demand for automated courtroom functionalities.

IT0083 Public Safety Architecture Modernization

Project Description

The Public Safety Architecture Modernization project supports implementation of common infrastructure supporting integrated Computer Aided Dispatch (CAD) and Public Safety Records Management System (RMS), including public safety communications, as well as Police, Fire and Rescue, and Emergency Medical Services records management. This project provides the underlying infrastructure components and shared capabilities required for implementation of an integrated, interoperable public safety system, as well as support for the operational components of a CAD/RMS including network infrastructure, and adopting standard Geographic Information System (GIS) to meet public safety requirements. In a multi-track and multi-phase project, the legacy CAD and mobile Police RMS and the Fire and Rescue RMS will be replaced.

Project Goals

The project will implement an integrated public safety information architecture enabling data sharing across functional areas of the CAD and RMS in order to support key public safety lines of businesses and provide flexibility to respond to both internal and external data sharing requirements. In this multi-track and multi-phase project, the legacy CAD and Mobile, Police RMS and Fire and Rescue RMS Systems will be replaced. In May 2008 a new Emergency Patient Care Reporting system (EPCR) was the first application to be implemented as part of this project. Options for integrating with the existing Sheriff's Office information system will be evaluated as well.

Progress to Date

The Project Plan called for completion of a gap analysis for each of the applications planned under this project. The County and Intergraph, the selected CAD/RMS vendor, jointly reviewed and validated all of the County's functional requirements as part of this effort. This was completed and the first planned implementation, the EPCR, was placed into production. Completion of these two high level goals included completion of several tasks that are key to next phases of the project, including network and infra-

structure design improvements and upgrades, confirmation of the requirements, and assessment of strengths and weaknesses of the existing commercial wireless vendors to support the project's functional requirements. All Fire and Police Department work sites have been upgraded with wireless hotspots. They now support the EPCR application and CAD Mobile. Ultimately Police Records Management and other Fire applications will also be supported. The public safety wireless hotspots will provide data communications to the field units, which enable updates to the systems to be pushed out over an internal network instead of having to manually touch every one of the mobile units in the County fleet. Additionally, a commercial cellular carrier was selected to provide the primary means of communication between the mobile devices in the field and the wired infrastructure located in the McConnell Public Safety Transportation and Operations Center (MPSTOC). In addition to the aforementioned goals, a significant amount of geospatial Information was captured, verified and incorporated into the new data model adopted by the Fairfax County Geographic Information System (GIS) Branch. This information will allow the CAD system to more accurately locate an incident and actually route first responders to the incident using the data that was collected during this phase of the project.

Project Budget

Funding of \$3,156,293 is provided to continue support of the Public Safety Architecture Modernization Project. FY 2010 funding will support project's shared milestones, performance bond, commercial wireless broadband, and staff augmentation.

Return on Investment

The Public Safety Architecture Modernization project represents a joint initiative undertaken by the public safety agencies in Fairfax County (Department of Public Safety Communications, Police Department, Fire and Rescue Department, Sheriff's Office of Emergency Management) and provides an integrated public safety suite for CAD and RMS, with supporting network infrastructure to support



robust GIS including automatic vehicle location (AVL), automatic vehicle routing recommendations (AVRR), broadband wireless data services and automated field reporting. Savings are achieved in implementing standards for all stakeholders, consolidating system infrastructure, and reducing system tool redundancies from prior independent systems. More importantly, this project greatly enhances Fairfax County's ability to respond quickly and effectively to emergencies that require coordination among the various responder organizations and share

information required for collaboration, case management, reporting, remediation and mitigation. The Public Safety Architecture Modernization project supports implementation of an integrated Computer Aided Dispatch (CAD) and Public Safety Records Management Systems (RMS), including public safety communications, as well as Police Fire and Rescue, and Emergency Medical Services records management. This project provides the underlying architecture for the operational components of a CAD and RMS including network development.



IT00086 Fire Station Alerting Technology Replacement

Project Description

The purpose of this project is to provide a turn-key system replacement of fire station alerting components. This alerting system is a critical part of the 911 systems and public safety response, and is a requirement specified in the National Fire Protection Association (NFPA) 1221 Standard. Existing station alerting equipment at the County's forty fire and rescue stations is nearing end-of-life and the primary components are not compatible with an Internet Protocol (IP) network infrastructure. This is a technology lifecycle replacement that is required in order to bring the Fire and Rescue Department's station alerting system to a technical level that will permit integration with the selected Public Safety Computer Aided Dispatch and Records Management Systems (CAD/RMS).

Project Goals

The business and operational objective is to purchase and implement a proven fire station alerting system that enables Fairfax County to meet the public safety goals of reduced response times, enhanced communication, and immediate access to relevant and critical information. The goal is to integrate the Fire and Rescue Department's station alerting system with the Public Safety Communication Center systems. The system will reduce reflex time for response by providing immediate unit based visual and verbal alert indication at time of dispatch and prior to radio voice dispatch. Additionally, it will provide safe lighting and alert process throughout the station for personnel response to vehicles, recorded announcements, and station alerting capabilities as required by NFPA 1221. Furthermore, the replacement system will streamline maintenance and support for system components.



Progress to Date

The initial investment for the core system infrastructure to interface with the new Computer Aided Dispatch System will replace the end-of-life infrastructure and network components, and is aligned with the Computer Aided Dispatch System implementation plan. The replacement and consolidation of the remaining fire station alerting components into this single system architecture will be planned for the future. A contract was awarded for the planned replacement and a project schedule has been accepted by the vendor and County.

Milestones:

- Contract awarded FY 2009
- Design complete FY 2009
- Install basic system in all stations FY 2010
- > System testing and acceptance as installed FY 2010

Project Budget

The FY 2009 project plan called for lease-purchase for full infrastructure replacement requiring a four year financial

commitment. The Fire and Rescue Department and DIT together developed a scaled-down and phased implementation where-by out-year costs would be determined by available funding. In FY 2008, \$1.3 million in Fire and Rescue Department salary savings were reallocated towards replacement of the most critical of the out-of-date station alerting systems. FY 2009 funding of \$200,067 provide for a phased-in full equipment replacement at the County's fire stations. Due to budget constraints FY 2010 funds are not available.

Return on Investment

The Fire and Rescue Department expects to reduce overall response time to emergency incidents through immediate alerting of personnel. The system leverages the Computer Aided Dispatch system and provides immediate unit based alert indications at time of dispatch and prior to radio voice dispatch. The process reduces what the industry calls the "reflex time", or the amount of time between when the call is dispatched and when the response units are boarded by personnel and ready to respond. This is a life-cycle replacement from aging and incompatible equipment to an integrated COTS system. Maintenance and support costs for system components will be streamlined.



3.3 Corporate Enterprise

IT0004.2 GIS Orthoimagery Update

Project Description

This project is part of County's ongoing effort to maintain the aerial imagery in the Geographic Information System (GIS). GIS provides County staff and citizens the means to electronically access, analyze and display land related data. The imagery is used in the My Neighborhood viewer, the Digital map viewer and the new 3-D viewer.

Project Goal

Project goal is continued implementation a four-year cycle to update orthoimagery for all 407 square miles of Fairfax County and use the data to provide updated Digital Elevation Models and 5' contours.

Progress to Date

With the acquisition of state imagery in FY 2007 the fouryear imagery update cycle is up-to-date. The County will be flown again by the state in 2009, and not again until 2013. State imagery will be upgraded to County standards using existing orthoimagery GIS resources.

IT0004.3 GIS Oblique Imagery

Project Description

This project provides oblique imagery that enables users to view the sides of buildings and structures and measure their height. This imagery enables agencies such as the Department of Public Works, Tax Administration, and Public Safety Agencies to reduce field time in assessing and planning, and enables staff to conduct analyses of buildings not previously possible. This imagery augments orthoimagery which is taken directly overhead and does not capture the sides to structures. Both sets of imagery are part of the spatial data in the GIS data warehouse, which gives County-staff access to a wide range of geo-spatial information about Fairfax County required in their business processes. The oblique imagery is also the source of the 3-D imagery of the Tyson's Corner and Reston Herndon areas. The 3-D imagery is essential in meeting board mandated requirements.

Project Goal

This project's goal is to provide oblique imagery as a key component of the County's spatial data warehouse. The data is highly valuable to many County agencies, and

Project Budget

No new funding for orthoimagery was included in the FY 2010 budget. Existing funds will be used to cost share with the state for the 2009 imagery the state intends to acquire.

Return on Investment

The Orthoimagery project provides a combination of costsavings, enhanced revenue and non-quantifiable benefits. Multiple County agencies have benefited from the use of orthoimagery data and others are expected to utilize the data to enhance efficiency. Orthoimagery is used successfully in property appeals cases and allows the County to effectively defend increased property assessments and help citizens with home assessment valuations. The imagery serves as a highly accurate quality controlled layer in the GIS to accurately locate features (e.g., building outlines, streetlights, storm water features). Orthoimagery is available in several public web applications, enabling users to view aerial imagery of any area of the County. These applications serve over a million maps per year enabling public users the ability to view parcel outlines, hydrography, as well as major and minor roads.

provides detailed current and historical information for research and analysis.

Progress to Date

The oblique imagery is valuable to agencies such as the Department of Tax Administration (DTA) in supporting their operations. In FY 2010, DTA plans to increase usage of oblique imagery to further reduce field inspection time and costs. Oblique imagery is also used in the existing CAD/911 system and will be used to a much greater extent in the new CAD/911 system since it integrates oblique imagery into its software, adding significant value to emergency response.

The County has complete oblique imagery libraries for calendar years 2003, 2005, 2007 and 2009 (2009 will be delivered in FY 2010). Originally five agencies: Police, Fire and Rescue, Tax Administration, Planning and Zoning, and Information Technology, undertook a substantial review of the technology and data and realized it provided significant value to their operations. These were the original



supporters and each agency now makes substantial use of oblique imagery. It usage continues to increase since it is available internally via the GIS GEM web system. Currently over 160 unique users of oblique imagery log over on average over 7,000 hours per month using oblique imagery. GIS staff coordinates agency needs, specifies requirements, performs Quality Assurance, and provides training and desktop implementation at no cost to agencies. The updates to the imagery are performed biannually. The County will also share the imagery with the Towns of Herndon and Vienna since they are within the boundaries of Fairfax County.

Project Budget

Existing funds continue the annual update photography and imagery conversion. No new funding available in FY 2010.

Return on Investment

The oblique imagery project provides a combination of cost-savings, enhanced revenue and non-quantifiable benefits. Oblique imagery is particularly useful in public safety since it enables staff to view and measure the sides of buildings to determine risks, site lines, and other key features. It is also helpful to Fire and Rescue for detecting small vertical features such as fences which could block fire fighter and fire hose access. Assessors are aided in the ability to determine the sides of buildings – an important component of an assessment. Oblique imagery holds the future potential of developing 3-D imagery since it contains building facades (skins) and elevation information, essential for effective representation of the actual areas.

IT0004.4 GIS Planimetric

Project Description

The original GIS base map for the entire County was developed from aerial photography flown in the spring 1997 to ensure high resolution and accuracy of base mapping. The GIS aerial base mapping provides mainly two different types of data sets – raster data, i.e., orthoimagery maps (spatially corrected aerial imagery) of the real world, and vector data, i.e., digitized planimetric and terrain relief features (observable features such as building footprints, edges of roads, sidewalks, streams, and the terrain shape from contour lines). Both sets of data are used widely as a back drop to variety of information and applications by County users and the public. County homeowners and businesses are able to compare tax assessments in their communities and access imagery for a variety of needs from across the County.

Project Goal

Develop a program to update approximately 25% of the County's planimetric and topographic data annually. The data set includes impervious features such as roads, pools, basketball courts and driveways, as well as 2' contours. This program is dependent on the availability of current aerial imagery.

Progress to Date

The County's planimetric features, DTM, and topographic contouring data needs updating to reflect topographical change and development activities. Through user surveys agencies have requested regular planimetric data update

each year in conjunction with annual orthoimagery update of about one fourth area of the County. The aerial photography source for the data update is provided from the February-March 2008 flight missions. A detailed statement of work was developed, with the first year capturing the SE quadrant of the County.

Project Budget

This project is jointly funded by Department of Public Works and Environmental Services (DPWES) and Department of Information Technology (DIT) through fund 104. In FY 2010 \$150,000 is provided in Fund 104 for continued support towards year three to a four year planned initiative to update GIS planimetric data in Fairfax County.

Return on Investment

The planimetric, DTM, and topographic contouring at 2' contour interval data update will provide a combination of cost-savings, enhanced revenue and non-quantifiable benefits. Planimetric, DTM, and contour data has proved extremely valuable in a wide range of County operations. Over the years GIS staff has designed and implemented many engineering mapping projects for several key agencies, DPWES, Park, and also Fairfax County Water, requiring 1'or 2' detailed accuracy DTM 1' contour data resulting in significant savings. For example the GIS staff provided 1' contour data for flood plain mapping of New Alexandria and Bellview project. Typically design and development of high precision engineering project takes about four to five months provided latest leaf off imagery is available.



This planimetric, DTM and contour update project makes a tremendous impact as it will allow agencies to readily access data needed for engineering design project anywhere in the County, which saves time and money and enhances response, efficiency, and overall productivity. Planimetric data will be an important component of mapping in the County's new Computer Aided Dispatch

system. Additionally, capture of many impervious surface features not currently present in the GIS enterprise database is a critical requirement for effective planning, designing, and management of storm water projects. Overall cross agency data sharing for numerous applications will become more cost effective and efficient.

IT0006 Tax/Revenue Administration

Project Description

This project provides the information systems development and technology infrastructure required to redesign the County's tax and revenue systems. The Tax/Revenue project facilitates a simpler process for citizens to fulfill their tax obligations and pay for services by modernizing the internal processes used for assessing, billing, and collecting County taxes and other revenues. In FY 2002, the County began replacement of the aging real estate mainframe system with a commercial-off-the-shelf (COTS) product called Integrated Assessment System (IAS). Implementation of IAS allowed for a comprehensive overhaul of many existing functions such as real estate administration, account maintenance, assessment, exemptions and adjustments, accounts receivable, and billing. The core system was completed in FY 2004. The current focus of the project is to migrate to the next generation of the IAS product, the WEB based iasWorld.

Project Goals

Project goals continue to focus on tax and revenue modernization by implementing the remaining web-based modules of the client server real estate system originally purchased in FY 2002. The implementation of additional product modules will enhance the efficiency of property assessing and inspection by field staff, enable a coordinated approach to managing public inquiries and correspondence, streamline common real estate transactions through customized forms, and provide the core technical architecture to enable the other interactive modules to operate.

Progress to Date

The assessment administration, CAMA (assessment), accounts receivable and delinquent collection modules of the client server tax system are operational and fully integrated with the County's cashiering system. These modules comprise the core tax system. Implementation of the web-based product, lasWorld, is ongoing.

Milestones:

- Implementation of IAS modules with the exception of the Delinquent Collections Tracking product – February 2004
- Implementation of the iCare internet real estate property information lookup tool (Internet plug in for IAS) and integration of IAS with the department's cashiering COTS software Revenue collector – June 2004
- Installation of the WEB citizen inquiry tracking system module of iasWorld, iRespond) – June 2007
- Implementation of the web based real estate system iasWorld – June 2008
- ➤ iMaintain Module Implementation FY 2009 FY 2010
- ➤ iField Module Implementation FY 2009 FY 2010
- > iTax Implementation FY 2009 FY 2010

Project Budget

No additional funding is provided in FY 2010.

Return on Investment

The remaining IAS product for installation (iasWorld) will permit improved customer service without the addition of staff. Staffing can be held constant as inquiries and correspondence increase due to population growth, changing demographics, and changes in real estate assessments and rates. Citizen inquiries will be more effectively managed, and response turnaround times improved. In addition, real estate appraisal staffs can more accurately collect and record property characteristic data from site inspections, as staff will have the ability to input and transmit data from the field. Improvements in data quality and currency will better equip the County to provide more equitable assessments, defend appealed assessments, and improve the timeliness of revenue generated fro the real



time recording of property improvements. In addition, the new process eliminates redundant data entry work by support staff, as web-based screens will have consolidated fields from several screens in the client-server system. By operating the real estate application within the County's infrastructure, staff can ensure the security of County

data communicated over the internet, monitor the application on a 24/7 basis for optimal availability, and ensure secure access.

IT0011.11 Electronic Accounts Payable System

Project Description

This project provides a solution that meets the County's goals for an electronic accounts payable process within the current infrastructure using adaptable technology to meet future requirements. Additionally, it provided for a phased-in implementation with minimum impact on existing business processes. The project developed a methodology to utilize new accounts payable electronic processing methods to dramatically reduce the amount of time and effort involved in processing accounts payable transactions. The new methodologies provide in-depth data analysis, targeted audit procedures, and improved internal controls to identify and correct weaknesses in the County's accounts payable processes.

Project Goals

This project aims to improve the operating efficiency of the entire countywide decentralized accounts payable process, and at the same time achieve the Board of Supervisors' mandates to reduce paperwork and support telework. These goals will be achieved by maximizing the County's use of proven imaging, e-signature, and workflow technologies to replace reliance on paper document processing. In addition to the improved process efficiencies and cost savings expected, it is anticipated that this project will increase countywide internal controls and management reporting by utilizing automated reporting techniques to improve analysis of the County's accounts payable processes.

Progress to Date

The electronic invoice package selected as the solution, Imagitek's Prodagio A/P, was installed in the production environment and the first go-live agency (DHR) was October 1, 2007, with rollout to the two other proof-of-concept agencies (DIT and FMD) on October 9th and October 15th, 2007. The selected solutions have proven capable of meeting the requirements with the roll to other County agencies scheduled for completion in FY 2010.

Milestones:

- Documented Proof-of-Concept Solution, November 2007
- County wide implementation of Phase I completion Feb 2008
- County wide implementation of PO invoices June 2008
- Enhanced Reporting FY 2009
- ➤ Non-PO invoice FY 2010
- Completed County wide solution for Electronic Accounts Payable – FY 2010

Project Budget

FY 2008 funding of \$520,000 will continue prior year efforts to implement a decentralized electronic accounts payable process from within the Department of Finance to County agencies. By using imaging software, e-signature capabilities, and workflow technology, the electronic accounts payable solution improves operational efficiencies in the County's financial processes. No new funding is available for FY 2010. Future technology enhancements will be accomplished through the Legacy Systems Replacement project (IT0079).

Return on Investment

This initiative involves the integration of the County's financial and procurement systems and will result in a paperless work process and enhanced management reporting. The greatest financial returns from implementing the electronic accounts payable process are reduced staff processing, document filing retrieval time, copier charges and storage costs. According to industry standards, the cost required to scan and index items is less than half of that required to manually file and retrieve folders of information. Based on the County's cost-benefit analysis, the reduction in staff processing time and copier costs would result in an annual savings of more than \$2 million. In addition, more than 800 boxes of records are



archived annually, which currently require 1,600 square feet of storage space. Based on the monthly standard rate of \$22 per square foot for storage, the reduction in storage cost will save more than \$400,000 annually. Fur-

ther faster invoice processing will maximize opportunities to realize vendor discount terms. The electronic accounts payable process also improves the County's relationship with its vendor community by facilitating communication.

IT0011.13 Automated Board Meeting Records

Project Description

This project will design and implement a document-imaging program in the Clerk to the Board's Office, which will enable the Clerk to the Board's Office to electronically capture Board of Supervisor meeting records and make them available on-line for the public and County staff.

Project Goal

The goal is to incorporate the Board of Supervisors' meeting videos with the agendas to create a robust easily accessible and searchable on-line record. Project will utilize the enterprise infrastructure for electronic records management.

Progress to Date

The project is defining system and user requirements.

Project Budget

FY 2006 funding of \$200,000 was provided to plan, design, and implement a document imaging program in the Office of the Clerk to the Board's. No additional funding is required for FY 2010.

Return on Investment

This initiative is expected to increase the efficiency of producing the board matters package including streamlining the process of getting the records on-line; provide a viable, accurate document system for older and one-of-a-kind documents; reduce error rates as much of the manual data entry will be eliminated; and reduce the space requirements for maintaining paper copies of documents.

IT0022.9 Correspondence Tracking and Management System

Project Description

The Correspondence Tracking and Management project enables County agencies to capture communications, track contacts, events and complaints in order to enhance staff and interagency communication. Since its initial launch in 1999, this project continues implementation of a proven Commercial-Off-The-Shelf (COTS) product known as Intranet Quorum (IQ) which has been successfully deployed in several County agencies. IQ is a Correspondence Tracking and Management System that provides an integrated approach to delivering services to citizens and staff. In addition, IQ offers a variety of data points for easy and complete reporting.

Project Goals

Project goals include enhanced communication between County staff, departments and agencies. The system provides an integrated approach to service delivery enabling users to link to other areas within the database, as well as extend outside the IQ system through scheduling, scanned images, email, fax, and incoming/outgoing postal mail. The project enables agencies to automate

business processes and workflows, reduce duplication of effort, share information. These benefits are amplified by the delivery of a seamless constituent interface and enhanced customer service.

Progress to Date

IQ was initially deployed at the offices of the Board of Supervisors, the County Executive, and the Clerk to the Board. Expansion to other agencies (or portions of agencies) has been on going effort. Over time, address data from the Geographic Information System (GIS) was utilized with IQ to increase agency productivity. To stay current with the County's technical standards, IQ was re-written to comply with the County's current standards.

Demonstrating both fiscal responsibility and agency business awareness, migration to the new version – IQ3 was phased in across user agencies, which allowed staff to perfect migration strategies and application knowledge as well as minimize impact on the agency's productivity.

In 2005 the Board of Supervisors directed the County Executive to expand the legislative function by assessing



the policy impact and response to proposed federal legislation affecting the County. The Federal Legislation Tracking Module was implemented in response to the need for efficient and automated system for tracking issues and specific legislation of interest to the County and reporting back to the Board in a clear concise manner. Additionally the module enables storage of agency information related to specific issues and/or bills. In FY 2010 project work will be primarily concentrated on migration to IQ3 for DP-WES agencies, Office of the County Executive, Office of Public Affairs, as well as continued support for current IQ users.

Project Budget

No funding is provided for FY 2010.

Return on Investment

Successful implementation provides enhanced communications between County staff, departments, and agencies, thus allowing agencies to share and monitor the status of projects, responses, and track other issues and events as those items progress through the County processes. The project enables agencies to automate business processes and workflows, reduce duplication of effort, and enable the sharing the information between agencies using present e-mail methods. These benefits are amplified by the delivery of a seamless constituent interface and enhanced customer service. In addition, this solution does not preclude installations of applications that support the County's IT architecture, or interact with other agencies' CRM applications.

Public Access Technology - KIOSK IT0024.1

The multimedia kiosk was part of the County's e-government strategy designed to assist citizens with access to government information and business transactions. Due to FY 2010 budget constraints and availability of more widely used e-government channels and internet capabilities, the KIOSK program has been retired.

IT0024.2 Public Access Technologies - Interactive Voice Response

Project Description

Interactive Voice Response (IVR) technology program develops custom interactive telephone applications that can access and update data in variety of County databases, in addition to providing static information in a timely, convenient manner. For those citizens who do not have access to the Internet, the project was established at the request of the Board of Supervisors "to enable the County's customers to conduct business with the County wherever and whenever it is convenient for the customer". It is one of the foundations for enhancing public access to government information and business transactions.

Project Goals

The primary goal is to continue the application of text-tospeech technology for certain applications aligned with egovernment goals. Interactive Voice Response enhancements include the continued integration of Web and IVR via XML technology for public use.

Progress to Date

The DIT IVR currently answers more than a million calls annually. The system is available approximately 24 hours a day to interact with citizens, providing an additional option

for conducting business with the County after regular business hours. By handling the more routine calls, the IVR allows staff to concentrate on those calls that most need personal attention. It also allows access to a great deal of information after hours or on weekends.

Current Applications:

Medical Registry services in 7 different

languages

COURTS: Circuit, General District & Juvenile, Court

Information Line (General Information, Traffic and Criminal Fine Payment by credit card,

access to specific cases),

CSP: Consolidate Services Planning survey of services

provided,

DPWES: Building Inspections (Requests and

Cancellations),

DPWES: Permit/Plan/Building Inspections Status Inquiry

DPWES: Scheduling Special Pickups of brush or bulk items

using customer address,

DTA: Real Estate Data (spoken data and FAX on

Demand by property address),

DTA: Real Estate and Personal Property Tax Payments FS: Survey of services to check the quality of service FIRE:

Fire & Rescue's Media Information Line (after-

hours fire incident updates),



HCD: Housing & Community Development's Housing

Waiting List (gives position on list),

HEALTH: Health Department Information and

Departmental transfers,

HR: County jobs availability and submitted resume

status

LIBRARY: Library Information Line (Locate Libraries by ZIP

code, phone number search),

OFC: Office For Children Training and Class schedules

registration Line,

OPA: Public Affairs 324-INFO Line (general County

information, phone number search),

POLICE: Victim Services Information Line (query of

offender release date information),

DIT: IT Help Desk – for all County computer related

problems.

Project Budget

Due to FY 2010 budget constraints no additional funding is available. The program requires on-going support from

e-government and telecommunications staff to plan and configure new systems, and to trouble-shoot telecommunications system problems.

Return on Investment

Public access technologies such as the IVR expand citizen access to County information and services and minimize staff resources needed to provide basic information, and allow staff deployment to more complex and specialized tasks. The Public Access Technologies continue to provide a single information architecture and supporting infrastructure for all platforms to deliver new information and e-services to the public. It expands the capabilities of the content management system in order to improve automated workflow, revision control, indexing, search and retrieval for enterprise systems. The project also improves search capability for citizens and constituents, and enables the County to build applications quicker and more efficiently by maintaining reusable components.

IT0024.3 E-Government - Internet/Intranet Initiatives

Project Description

This project supports initiatives that improve public accessibility to government information and services. A comprehensive approach is employed to ensure efficient infrastructure capable of supporting multiple business solutions. In addition to enhancing customer service for availability anywhere, any time, public access technologies reduce staff involvement in providing basic information and transactions, thereby allowing personnel to perform more complex tasks and respond to requests for more detailed or specialized information. Internet/intranet initiatives provide significant and wide-ranging opportunities to use technology as a means of making information more readily available to the public. Initiatives include research and development of emerging technologies, expansion of Web applications, improvements in search and navigation, integration with internal systems and other public access channels, and sustaining infrastructure.

Project Goals

The project's vision is to provide new information and services on all platforms, while continuing to build on existing information architecture. The planned functionality is delivered in support of the County's taxonomy of information and services, using a single supporting infrastructure. The solution is based upon a single content repository for all platform and agencies. The repository enables various

features of content management to provide accurate and reliable information, provide additional search capabilities on the public web site, and enable information sharing. The project includes implementing standards and processes for information engineering so that the same application and data is used by County agencies in the development of Web content and applications.

Progress to Date

The County's Public Web site has been an extraordinary success. The County site receives approximately 52,445 visitors per day, which equates to an average of 297,013 page views per day and an average of 1,632,298 hits per day. Approximately 55 County agencies have a presence on the site. The functionality of the site expanded significantly in recent months with the addition of significant content and information as well as the capability to conduct new and updated business transactions.

On going strategy include 'Sharing' which has become an integral part of the Web experience. It is referred to as online collaboration, and known as Web 2.0, social networking or social media. A few examples include wikis (community developed reference material), podcast (subscription based audio information), RSS or Really Simple Syndication feeds (subscription-based information), Second Life (virtual reality) and Twitter (social networking). The extensive use of Web 2.0 in social networking enables



wide spread collaboration and information sharing, and enables individuals to rapidly share news and opinions worldwide. The County extended its presence by launching content on three social networking sites:

Facebook (http://www.facebook.com/group. php?gid=7901829756),

Twitter http://twitter.com/fairfaxcounty Youtube (http://www.youtube.com/user/fairfaxcountygov).

1 – Public Web Site Search and Navigation

During the first phase of the project over 120 content contributors were involved in migrating information from the old site to the redesigned site with a six-month period. The Project team defined a basic Information Architecture for the site, which was then validated by 14 citizen and business focus groups. A "look and feel" template was developed for the redesigned site and migration of over 20,000 files to the new templates was coordinated by the project team. Most importantly, the establishment of working inter-agency groups for the development and dissemination of standards related to site design, application development and implementation proved critical in the project's success. As part of the redesign, a "Contact Us" database was implemented, which provides citizens with direct contact information to County staff from a single search interface. Additionally, site search functionality was enhanced.

In FY 2003, the main subject area pages (Living, Doing Business, Visiting and Government) were developed. Enhancements of the site included: News & Information section, Emergency Information, Local Weather and improved navigation. In FY 2004, a robust and secure environment that facilitates delivery of integrated and accurate infor-



mation to citizens was built. In FY 2005, several new applications were added including Child Care training, My Neighborhood applications, kids and Teen portal, Seniors and Disability portal, Crime Mapping, and revamped DTA e-pay and Consumer Protection pages. In FY 2006, a new search on the public web site was implemented making site accessible via mobile devices.

In FY 2009, the public web site was redesigned to improve the architecture and functionality with a fresh look and cutting edge enhancements. To provide easy access to county wide services and information, consistent left-side navigation was introduced throughout the site. The implementation of the Google Search Application augmented the overall search functionality of the web site. Additionally a highlighted news section provides easy access to information categorized by topic, and brings into focus various County agencies, County wide initiatives, and featured County services. The public web site is part of the "Going Green Initiative" and provides a conduit for carrying out on-line business with the County around the clock. Additionally, in order to improve ergonomics and enhance accessibility a new color palette as well as text only, printer friendly, and text resizing features were introduced.

2 – Infrastructure Architecture and Management

The following Internet/Intranet Infrastructure initiatives are on-going:

- Secured network settings on all 34 servers to minimize risk of intrusion
- Implement a statistical reporting system for both Internet and intranet servers
- > Refined server monitoring system

3 – Interoperability

As a participant in the Government without Boundaries cross-jurisdictional project, Internet Services staff installed ASP.Net and created a Web Service, which generates XML data from a SQL database using a collaboratively defined schema. This project allows Fairfax County to share park-related data with other local, state, and federal jurisdictions. Additional critical work on regional interoperability for homeland security linking Emergency Operations Centers and CAD functions began in FY 2005 with implementation of a pilot prototype in FY 2006. In FY 2010 efforts will continue with the Department of Homeland Security towards development of a data exchange hub for public safety computer aided dispatch information in the metropolitan region.



4 - Infoweb Redesign

The look and feel of the main page of the Infoweb (Intranet site) was redesigned, and continues to be enhanced. This is an on-going process that links with agency operational improvements.

Approximately 55 County agencies now have a presence on the site, offering more than 11,000 HTML documents, 12,500 PDF documents, and 15,000 images on the Internet site. Most agencies have Web content contributors, and Internet Services staff support content creation efforts for those agencies without a dedicated Web presence. The County Infoweb will continue to be updated with additional access to enterprise data and interactivity, and expanded to become a viable alternative for full transaction-oriented applications. The addition of new information and increased business functionality is essentially an ongoing project. Based on conversations with a wide range of County managers, it is also expected there will be numerous concurrent application development requests from a dozen or more agencies for core web-enabled applications as the benefits of the technology become more widely recognized. These requests for support are handled on an as-needed basis based on priority, visibility and functionality, and highest Return on Investment.

5 - Web Content Management

Web Content Management will deal with refining the site's information architecture, defining and implementing replicable workflows, as well as designing and implementing the supporting infrastructure for Web content contribution. A COTS solution was purchased and is being implemented.

6 - e Services

Internet Services prototyped new application development platforms and developed standards and best practices for the current environment. DIT supports other agencies in the development of Web content and applications. New and updated business transactions supported by the Internet Services staff over the last year include:

- ➤ HS/OFC Institute for Early Learning Training (IFEL)
- Hs/OFC Child Care Management System Modification in FY 2004
- ICARE DTA Real Estate Assessment and Information Query
- DHR Applicant Information Management System (AIMS)

- > Public Meeting Calendar
- > GIS Digital Map Viewer Modified in FY 2004
- DTA ECheck Modified in FY 2004
- Contact Us Modified in FY 2004
- ➤ Library Historical Newspaper Index
- ➤ Library Booklists
- > Library Picturebooks
- DTA TaxEvaders
- ➤ HS HIPPA
- DPZ eComplaints Modified in FY 2004
- ➤ Infoweb Ibusiness Enterprises (iBE)
- Infoweb DFS Independent Living Program (FILP)
- > Infoweb DAHS Facility / Site Profile
- Infoweb DFS Account Receivable (FAMSAR)
- ➤ Infoweb HS eAssist Modified in FY 2004
- ➤ Infoweb HS FCPMS / IAS Modified in FY 2004
- County WEB Kids and Teens portal, FY 2005
- County WEB Crime Mapping, FY 2005
- County WEB Child Care training, FY 2005
- County WEB My Neighborhood, FY 2005
- County WEB Seniors and Disability portal, FY 2005
- County WEB Sheriff Service Civil Process, FY 2005
- > County WEB Enterprise Search FY 2006
- County WEB Public web site accessible via wireless, FY 2006
- County WEB Boards, Authorities and Commissions, FY 2006
- County WEB Epartnerships, FY 2006
- ➤ Infoweb Courts Electronic Wayfinding Circuit Court Docket, FY 2006
- ➤ Infoweb Sign-in and Course Evaluation System (SACES), FY 2006



- ➤ Infoweb Courts Scheduling System, FY 2007
- ➤ Infoweb RSSFeeds, FY 2007
- County WEB Athletic Facilities Application Requets (AFAR), FY 2007
- ➤ County WEB FAQ's FY 2007
- County WEB RSSFeeds, FY 2007
- County WEB Podcasting, FY 2007
- County WEB Special Needs Registry, FY 2008
- County WEB Social Needs Registry, FY 2008
- County WEB Library Audio Books, FY 2008
- County WEB Library Video, FY 2008
- County WEB Contact US modified, FY 2009

Project Budget

Due to FY 2010 budget constraints no additional funding is provided. The project requires on-going support from Public Access staff and infrastructure staff to help plan and re-configure new systems.

Return on Investment

The E-Government project continues to provide single information architecture and supporting infrastructure for all platforms and new information and e-services to the public. It further expands the newly implemented content management system to improve automated workflow, revision control, indexing, search and retrieval for enterprise systems. The project improves the search capability for citizens and constituents while enabling the County to build applications faster and more efficiently by maintaining reusable components. Public access technologies minimize staff resources necessary for providing basic information, thereby allowing staff deployment to more complex tasks that require detailed or specialized information.

IT0072 Customer Relationship Management (CRM)

Project Description

This project provides the foundation for a comprehensive call center technology solution based on an open architecture, providing an opportunity for sharing process, resources and critical information across multiple Fairfax County call centers. This project addresses service needs by remedying existing business problems while improving operational efficiency and upgrading the technology infrastructure for all County call centers.

Project Goals

The goal of this project is to implement a comprehensive CRM application which will use industry standard call center technologies and incorporate existing County automated tracking systems. The objective of County call centers is to provide timely and appropriate assistance based on the citizens' needs. Additionally the goal is to provide an opportunity to leverage call center resources through virtual sessions. This project does not build or consolidate existing call centers nor create a central County call center site. The concept provided a central technical architecture and infrastructure foundation supporting call center processes, integration, and sharing of resources as appropriate in improving overall services. This project is complimented by the telephone modernization project, which will improve the telephony foundation needed to distribute and track calls.

Progress to Date

A project steering committee consisting of DIT and agency staff that use or have interest in call center functionality has been established to manage the implementation and integration of the CRM software within the County's infrastructure environment. CRM application was deployed to support three Office of Public Affairs customer center sites. Frequently requested information and telephone numbers for County services and home owner association data is made available in a centrally used knowledgebase to support consistent distribution of information. The Office of Public Affairs processed over 33,550 requests for County information and resources in the past year and half. The Office of Public and Private Partnerships (OPPP) is the clearinghouse for partnership information in Fairfax County. Efforts in OPPP have consolidated disperse contact lists, business partners, and resources enabling staff to utilize the system as a data depository for contacts, accounts, cases, service requests, solutions, correspondence, activities, and management of allocated staff and volunteer resources. Seible CRM solution was implement in the Lee and Dranesville District Board of Supervisor Offices in FY 2009. Implementation of Computer Telephony Integration and on line user training is planned for FY 2010.



Milestones:

- Office of Public Affairs Implementation completed FY 2008
- ➤ Board of Supervisors Pilot FY 2009
- > Office of Public Private Partnerships FY 2009
- Implementation of Computer Telephony Integration and on line user training – FY 2010

Project Budget

Due to FY 2010 Budget constraints funding is not available for this project.

Return on Investment

Return on Investment is realized from increased productivity from automation and/or streamlining of telephone processes, improved and reliable data capture required for mandatory service reporting, enhanced citizen communication and issues resolution, as well as delivery of improved operational efficiencies. CRM will allow improved historical data tracking through one system, increase awareness and insight to ensure appropriate follow up of citizen needs and concerns. It offers a more holistic view and aids in making well informed decisions about service delivery and improves communication.

IT0079 Legacy System Replacement (FOCUS)

Project Description

Fairfax County government and school system have embarked on a multi-year, joint initiative to modernize the portfolio of enterprise systems that support finance (FAMIS), human resources (government: PRISM -school: LAWSON), budget (BPREP), procurement (CASPS) and related administrative applications with an integrated approach that has the flexibility to meet current and future requirements. The project seeks to mitigate the risk that antiquated and disjointed systems pose for system failure and inferior data.

The current 'stovepipe' legacy business systems are on various, old technology platforms using a variety of hardware and software architectures integrated through a number of interfaces and reporting tools. Previous assessments of these aging systems revealed that they are past their projected useful lifecycle, no longer meet today's technology standards, and do not meet the demands of resource and financial management and decision-making. System limitations continue to drive a proliferation of multi-step tasks to produce desired data and the development of numerous 'workaround' systems to gain necessary functionality currently not available. This has also resulted in an exponentially increased risk for fraud and security vulnerabilities. Due to their age, many of these systems have no vendor support and rely on retirement eligible in-house staff for maintenance.

Of these systems, the County government's Personnel Resource Information System Management (PRISM) is the most vulnerable to immediate obsolescence issues. It is over 20 years old and highly customized based on historical County operational practices to the extent that it cannot be further enhanced. Further, attrition of in-house techni-

cal staff as they reach retirement age is jeopardizing future support for maintaining this legacy application – with the other systems approaching a similar expert support dilemma. Due to the impending lack of support, PRISM is the first of the legacy systems to be replaced.

Project Goal

A governance body of senior officials of the County and school system stakeholder agencies has endeavored to identify the optimal strategy to pursue in its effort to procure an integrated financial/procurement/human resources/budget suite that will support agencies in the delivery of government and school services and activities, take advantage of best practices, provide the opportunity for multi-faceted data-driven decisions, significantly improve the efficiency and effectiveness of existing processes, enhance e-government initiatives, promote telework opportunities, and aid in the transformation and standardization of financial and human resource processes. This initiative will foster an environment of change and redesign to allow for more efficient and effective processes.

Previous funding was provided to begin an assessment of the legacy systems used to support core business functions; identify, review and streamline existing business processes currently supported by legacy systems; analyze a review of existing and future trends in software and systems implementer marketplace; and identify and refine functional business requirements necessary in the future software.

Progress to Date

A joint Steering Committee and project team comprised of



County and School personnel has been formed. The Government Financial Officers Association (GFOA) is currently under contract to provide direction and resources in the identification of current processes, creation of requirements, and preparation and review of the procurement phase. During this past year, the project completed the development of its' strategic design and began to implement the prerequisite planning phases - business process mapping involved the production of more than 200 diagrams to document 64 key current business processes. More than 400 County and school staff from a cross section of the user community including functional managers, subject matter experts and end users assisted in this effort. Requirements gathering and validation involved examining 17 core processes in the finance, procurement, budget and human resource/payroll areas to identify what users need in a new system, followed by validation of those requirements. This provided the documentation necessary to move into the procurement phase of the project, which commenced in December 2008. During the last half of FY 2009, the project team evaluated software products and system implementer services.

The County's approach for acquisition is for separation of the solicitations for product suite and implementer services. Steering committee members of the key stakeholder agencies for both County and Schools and staff participated in in-depth analysis of top tier products. After selection of the software solutions suite, a solicitation for the implementer will be competed, for a company that has both technical product knowledge and experience in the solution selected, and strong experience in government and schools K-12 business.

Project Budget

FY 2009 funding of \$7,000,000 provides continued investment in this initiative, positioning the project to award the software and systems implementer contracts. Due to budget constraints FY 2010 funding is not available.

Return on Investment

The project seeks to mitigate the risk that antiquated and disjointed systems pose for system failure and inferior data. Automation and modernization will empower both employees and managers to execute processes more efficiently, and make the best strategic decisions based on the most timely and accurate information. This shifts the orientation of the system from that of a data repository to one of an information system solution. With the migration to a more standard, supportable database and development environment that incorporates workflow and Web technology, the project expects to create a collaborative environment

where access to data and information, even from remote locations, is based on system "look and feel" flexibility, intuition, data definition, data stewardship and security. The project will:

- Provide a seamless integration of a new system with existing applications;
- Reduce the number of shadow systems and reconciliations between systems;
- Align the reporting strategy with the County government and school system overall data reporting and consistent information management throughout the organizations;
- Incorporate fully integrated best business practices;
- Develop a system that is user-friendly and that empowers users to improve their business processes;
- Add and improve functionality in back-office functional areas:
- Improve the quality and accessibility of information for decision support;
- Reduce redundant data entry, storage, and paper processing;
- Support the countywide balanced scorecard initiative;
- Improve operational effectiveness and productivity;
- > Enhance web self-service and improve customer service; and
- Retire existing legacy and back office systems and tools.





3.4 Technology Infrastructure

IT0050 Public Service Communication Replacement

Project Description

This project provides continuing support for the Public Service Communications System, which provides two-way radio communications for all County non-public safety agencies as well as the Fairfax County Public School Transportation Department (school buses), FASTRAN and the Fairfax County Water Authority. The completed system provides adequate call processing capacity and area coverage to more than 90 percent of the area within the jurisdictional boundaries for Fairfax County. This project replaced the 20-year old Public Service Communications System which was based on a design that used two transmitter tower sites located in Lorton, on the Energy/Resource Recovery Facility smokestack, and in Fairfax City, on the rooftop of the Massey building. The old system only provided geographical coverage for approximately 60 percent of the County and had limited call-processing capacity, frequently resulting in unavailability for users. In addition, the old system required users to manually select the correct radio channel based on their location within the County, requiring knowledge of the coverage each communications were not possible and many of these locations are heavily populated areas of the County. The old network did not meet the user needs for additional coverage nor provided for future growth or for advanced features, such as mobile data communications.

Project Goals

The new radio system eliminated sever geographical coverage problem for County agencies, and provides reliable communications for the County's fleet, back-up and interoperability supporting emergency management activities, and communications for an increasingly mobile workforce. The new system also provides a fully independent backup radio system for public safety agencies.

Progress to Date

Prior year activities have consisted of the completion of a consultant study with recommendation for the replacement systems, the development of requirement specifications, contract award, tower site acquisition, and FCC licensing requirement activities, construction, and activation of transmitting tower sites, and the migration of schools and County fleets to the new system. The entire network and the remaining migrations were completed in FY 2007.

Project Budget

The FY 2010 project cost is estimated to be \$2,053,989 and includes the sixth-year of a seven-year annual lease-purchase payments for the new radio network infrastructure, including the increase of radio repeater location from two to seven sites, to ensure greater than 90 percent call coverage, and for operating costs during the year. Based on a portion of project costs, derived from the number of radios users that will be operating on the system as a percent of the total number of radios; \$1,272,088 will be recovered from Non-General Fund Supported agencies, the Fairfax County Public Schools and Fairfax County Water Authority in FY 2010, netting in a general fund cost to the County of \$781,901.

Return on Investment

In addition to enhanced reliability and coverage, the new network eliminates the two zones within the County and provides for seamless coverage on one system regardless of location, as well as provides ample reserve capacity for peak use periods and future fleet expansion. The replacement system provides reliable radio coverage to many areas of the County that were not covered by the older radio system. This provides the necessary protection and safety for bus drivers and other staffs that depend on reliable communications, improves customer service to County citizens and other County agencies, and reduces reliance on commercial wireless networks. The new system is fully compatible with the mobile and portable radios used by the County's public safety radio system, which allows for direct communication between public safety and public service users for incident or disaster management, and provides a separate back-up system for the Public Safety system should that system fail. The County realized cost avoidance of over \$3 million by using the public service system to serve as the back up to the public safety system, rather than modifying public safety system.



IT0058 Remote Access

Project Description

This project supports enhanced and expanded capability of internal users to access the County's systems form remote locations for service field activities, telework, and possible pandemic outbreak access. To accomplish this, the telecommunications infrastructure must be flexible in its modes of access, while maintaining a stable and secure communication environment.

To accommodate varied hardware and software capabilities of prospective telecommuters and the architecture of agency specific applications, the remote access solution uses a variety of technologies including dial-up modems, Secure Sockets Layers (SSL) Virtual Private Network (VPN) technology, and Citrix servers to meet the various access requirements. This project supports capability enhancement and expansion of Citrix using thin client technology. Since a number of projects use Citrix to access County information, the telecommunications infrastructure must be flexible in its modes of access, while maintaining a stable and secure environment.

Project Goals

An enterprise-wide standardized remote access control methodology provides a solution for employees and external system users, and also is intended to be expanded to partners and County customers and residents to authenticate their identity in order to gain access to relevant data and do business in a secure manner. All user

authentication and authorization management is policy based and centrally managed allowing for comprehensive audit and reporting services to support and log information on the extensive user base.

Progress to Date

Required software licenses were obtained and project activity is on-going. A new and improved Citrix farm with the latest technologies was implemented in FY 2008. The expanded Citrix farm prepares the County for continuity of operations in case of catastrophic events such as pandemic flu, weather related disasters, etc.

Project Budget

In FY 2007, funding of \$100,000 was provided to continue the build out of the telework environment and to increase the number of applications that can be accessed remotely. Additional Citrix licenses, Microsoft licenses and consultant services were required in addition to Security Token Cards and application software licenses. No funding is available for FY 2010.

Return on Investment

This project provides a cost effective approach to enhance the County's infrastructure in order to provide flexibility for a variety of end-user devices that may be used by County staff. The capability encourages more employees to take advantage of telecommuting in line with regional goals supported by the Board of Supervisors.

IT0060 Telecommunication Modernization

Project Description

This project is designed to implement Fairfax County's strategic goal of providing Voice over IP (VoIP) services that maximizes utilization of County network capabilities and take advantage of functionality and features provided by leading-edge technology. DIT is implementing a strategy for voice services, utilizing convergent-IP ready technology, over the County's fiber I-Net. This strategy includes a solution architecture that is scalable to support the variety of County sites and agency business requirements distributed over 400 square miles. The strategy uses IP-based telephone service at the smaller sites, so that they can be brought into the common voice enterprise architecture, avoiding investment in converging IP data traffic with IP voice traffic onto one data network. This strategy is both prudent and forward-looking. It will posi-

tion the County to increase its use of advanced convergent technologies such as data, video and voice, and facilitates reductions in other voice service operational costs. The plan is in full alignment with the County's principle of implementing contemporary, but proven, technologies, optimizing IT investments and creating more operational cost efficiencies.

Project Goals

The strategic goals of this project is to move the County towards a long-term, flexible voice solution that will underwrite the use of Voice over Internet Protocol (VoIP) while maintaining complete TDM (current technology), functionality. An IP enabled enterprise-class platform will provide the County with the ability to adopt newer value added features from the maturing IP telephony environment. Any



new architecture must yield a flexible yet stable infrastructure that can be the foundation for eventual movement to a converged network environment. Over the life-cycle of this transformational project, change will be introduced in more manageable increments than would be possible in a massive change out of technology, applications and processes. The following six strategic goals for Fairfax County voice services were developed and reviewed with senior County technology managers:

- **Goal 1:** Optimize the total life cycle cost for voice services.
- **Goal 2**: Provide common voice architecture, Countywide.
- **Goal 3:** Provide secure remote access for voice and data to expand Telework
- **Goal 4:** Provide compatibility with "best-in-class citizen access technologies.
- **Goal 5:** Develop a survivable architecture that is scalable and flexible.
- **Goal 6:** Prepare for the convergence of voice and data onto one logical network.

The replacement of the current voice communications infrastructure is anticipated to be a 5 – 7 year project that when completed will touch approximately 12,000 Fairfax County employees. The installation is planned to occur in phases which will allow multiple opportunities and avenues to prepare the Fairfax County Government community for the transition, and thereby ensure a smooth change of voice platforms. Successful implementation will require accurate and consistent communications regarding project status, system features and functionality, dialing plan information, and changes that users (both employees and citizens) can expect.

Progress to Date

Following the contract award in May 2006, Fairfax County and Avaya, Inc. launched an aggressive "Immediate Relief/Proof of Concept" implementation at 7 sites. These sites were chosen to eliminate the escalating degradation of service in some of the County's oldest equipment. To date the following agency/locations have been migrated completely to the Avaya platform:

- Community Services Board North West Center
- Chantilly Regional Library
- Community Services Board Lincolnia Center
- Alcohol and Drug Services Crossroads

- > DIT Radio Shop
- Community Services Board Springfield Mental Health
- > Alcohol and Drug Services Administration
- > Housing and community Development Headquarters
- Opportunities Alternatives and Resources City Square
- Facilities Management Department Burke Station Rd. (6 Buildings)
- Volunteer Fairfax
- Finance Building Annex
- > Juvenile Detention Center
- > Juvenile and Domestic Court
- Police Annex
- Massey Building Police / Fire and Rescue HQ
- ➤ Legal Aid Finance Annex
- > Jennings Judicial Center
- > Burkeholder Center and Annex
- Office of Sheriff
- > Dept of Information Technology
- Dept of Tax Administration
- Dept of Management & Budget
- Dept of Public Works and Environmental Services
- ➤ Human Resources
- Internal Audit
- > Human Rights Commission
- > Equity Programs
- Cafeteria
- ➤ Civil Service Commission
- Alternative Dispute Resolution
- Credit Union
- Dept of Vehicle Services

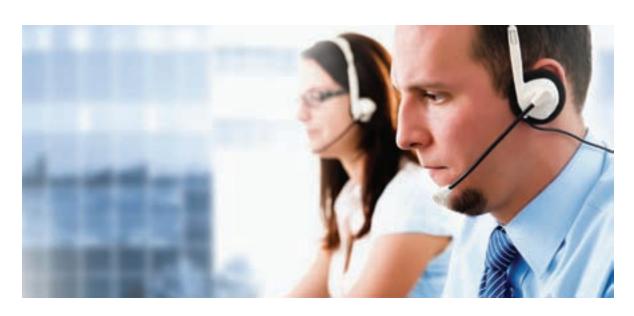


- > Fitness Center
- > Library Administration
- > Office for Women
- > Planning Commission
- > Purchasing & Supply Mgmt
- Dept of Cable Communications and Consumer Protection
- ➤ Office of Finance
- > Mount Vernon Mental Health
- ➤ Board Satellite Offices Gov Center
- > Board conference rooms
- > Board reception area
- > Chairman's Office
- > Clerk to the Board
- > Office of Public and Private Partnerships
- > Office of Public Affairs
- County Attorney
- > County Executive
- Electoral Board / General Registrar
- > Auditor to the Board

- > Storm Water Management
- > Bailey's Affordable Health Center
- > Police Organized Crime and Narcotics
- Criminal Justice Academy
- Cameron Glen (North County)*
- Suicide Crisis Center Woodburn Rd
- > Burke Library
- > Joseph Willard Health Center
- New Beginnings
- > Retirement Agency
- Board Offices
- > Springfield District BOS Office
- > Braddock District BOS Office
- > Providence District BOS Office
- > Mt. Vernon District BOS Office
- > Hunter Mill District BOS Office
- ➤ Mason District BOS Office

Goals for the Remainder of FY 2009:

- ➤ Lee District BOS Office
- > Sully District BOS Office





- Dranesville District BOS Office
- Implementation of Red-Sky employee location solution
- > Implement Meet Me Conferencing
- > Implement Meeting Exchange Conferences Services
- > Implement Broadcast Voice Mail Solution
- ➤ Beta Test Speech Access

FY 2010 Goals:

- > Pennino Building
- > Herrity Building
- > Implement Enterprise-wide Mobility Solution
- > Beta Test Nortel / Avaya Integration
- > Beta Test Unified Communications Solutions

Project Budget

In FY 2010 \$2,100,000 is provided to support continued implementation of the Voice Modernization Project, of which \$1,000,000 is provided from the County's Cable Fund (105).

Return on Investment

The benefits derived from the implementation of this project are quantifiable and substantial. Direct cost savings include: reduction in leased circuit costs; a reduction in message unit costs for outside phone calls; and a reduction in overall maintenance costs, including moving phones, adding new phone lines and changes to existing phone service. In addition, the new voice infrastructure will allow Fairfax County to leverage embedded technology assets and to improve service delivery quality. Business processes will be streamlined because of the ability to share information over an integrated communications platform.

IT0061 Information Technology Security

Project Description

This project supports the County's security architecture, designed to provide an appropriate level of protection for all County information-processing resources regardless of technology platform. New security technologies are implemented in order to meet current and future security needs and protect County networks and the confidentiality of legally mandated information contained in many County systems.

The Fairfax County Information Technology Security Policy, the mandated specifications of the Commonwealth of Virginia Information Technology Security Policy and standards, and the Health Insurance Portability and Accountability Act (HIPAA) Security Rule, along with other mandated privacy laws and County internal audit priorities, are examples of governing legal precedence and policy that dictate a requirement for audit controls to record and examine activity in information systems. Such audit controls protect the integrity and sensitivity of information contained within the County's technology infrastructure. This project provides advanced security tools to proactively build and measure comprehensive security best practices within agencies and across the County.

Additionally this project affords Fairfax County the ability to manage connectivity to its infrastructure through

controlled network connections that will interrogate unknown devices for verification of anti-virus, patch management, and licensing standards. Devices found out of compliance are quarantined/or refused access until they can be placed in compliance.

Project Goals

This project continues enhancements to the County's modular network infrastructure that incorporates the necessary levels of embedded security in specific functional areas. In order to manage the modular infrastructure and the additional firewalls, intrusion detection systems and networking devices a Networking Access Control (NAC) solution is deployed to identify non-standard and non-secure systems that are a threat to the security of the infrastructure and County data. Additionally, the on-site support of skilled network engineers are required to roll out a simplified security design and create manageable security architecture that allows for security devices to function optimally and provide identification of specific threats. The project includes the implementation of standardized and centralized secure authentication and authorization methodology for web-based applications.

The distribution Node Intrusion Prevention System (IPS) solution provides the proactive ability to block and detect malicious traffic before it spreads across the County's



Wide Area Network. Combined, these efforts reduce the risk factors that can compromise the availability, integrity, and confidentiality of County information technology assets. This project continues enhancements to the County's modular network infrastructure to allow for incorporation of necessary levels of security to be embedded in specific functional areas. User authentication and authorization management is policy based, centrally managed, and allows for comprehensive countywide security monitoring and audit control process that include audit and reporting services.

Progress to Date

Work associated with planning, design, and proof of concept in a development environment for the NAC project is underway; while planning and design for the IPS project is complete. The required technology tools will be implemented in phases based on infrastructure engineering needs, business function priorities, and legal mandates aligned with County e-business projects.

Project Budget

Due to budget constraints FY 2010 funding is not available.

Return on Investment

This project ensures system compliance with security policies, provides for centralized real-time auditing, provides a solution for managing users and their Web application access, ensures timely access to business assets through an authenticated identity, and provides for an immediate response to technology threats. The information security and internal audit offices will have the capability to perform security management audits and analysis centrally across platforms and verify progress in security management protection via software reporting capability. The implementation of the IPS at the Distribution Nodes helps mitigate the risk of malware propagation that results in a Denial of Service (DOS) condition. In addition, botnet traffic can also be detected and blocked. These projects significantly decrease the staff time required for manual auditing and IT security investigations, and grant the Security Office the ability to provide enterprise-monitoring capabilities as a safeguard to improve reliability and reduce downtime. Non-standard and non-secure systems can be identified as a threat to the security of the infrastructure and County data. The solutions address multiple regulations with minimum resources by implementing and measuring compliance through automated analysis.





3.5 Human Services

IT0011.9 Document Management and Imaging - DFS

Project Description

This project supports the transition within the Department of Family Services (DFS) from manual to automated processes for filing, storage and access to records using document management platform technology.

Project Goals

Goals of the project are: a) to provide a reliable and secure system for cataloging, archival and retrieval of sensitive Human Services documents for case management, and, b) improve response times for client inquires of case records. In addition, the project allows for the management and preservation of DFS records in accordance with State and Federal mandates, and avoids non-compliance issues associated with the degradation, damage, or loss of paper files.

Progress to Date

This is a multi-phased project, where phases will be delivered in modular components aligned with the readiness of the necessary infrastructure. By implementing smaller phases, disruption to business operations is minimized. In FY 2005 and FY 2006, Infrastructure components were developed to support the delivery of the initial component for Family Self Sufficiency (FSS). Functional requirements and a prototype design were completed in FY 2007. Also in FY 2007, requirements definition began for Children, Youth, and Families, for the integration of the Commonwealth's SPIDeR system, and for the replacement of a data feed to a key financial systems. In FY 2008 system design and initial development / configuration tasks were completed for FSS.

Phase I - Self-Sufficiency:

Production rollout of the Document Case Management solution – FY 2009.

Phase II – Children Youth and Families:

The division planned to conduct internal business process mapping and review statement of work proposals for vendor-engaged requirements analysis. However, due to FY 2010 budget constraints this phase of the project is deferred.

Project Budget

In FY 2005, funding of \$1,179,567 was provided to automate the DFS record/document management processes. Due to budget constraints funding is not available in FY 2010.

Return on Investment

Cost savings will be realized as a result of improved processing of paper documents, use of staff time, and reduced error rates for more effective and efficient document management. Imaging and workflow projects are expected to increase the security of records, promote telework; reduce error rates since much of the manual data entry will be eliminated; and reduce the space requirements for maintaining paper copies of documents. With the increased availability of accurate, available closed records, the Fraud Unit will be able to more easily investigate cases that may result in increased reimbursement. Accurate and timely processing of services and records are necessary to insure reimbursement for provision of services.

IT0011.10 Document Management and Imaging - OFC

Project Description

This project will provide for the second phase of the Office of Children's (OFC) Electronic Records Management system. In FY 2007, the project transitioned Community Education and Provider Services, and the Child Care Assistance and Referral program to document imaging technology. The second phase of this project includes the Head Start and School Age Child Care program. Head Start maintains files for over 500 children and families in multiple locations. With this technology field staff and federal audi-

tors will have the ability to review files electronically without traveling to multiple locations. The School-Age Child Care Program provides direct services to over 14,000 children in 134 centers throughout the County. Files are maintained on all staff, children and centers. The transition to an electronic system will ensure that citizens receive the most efficient, highest quality of service across OFC program division, and that all legal mandates are satisfied regarding record archival and citizen and client privacy. Phase III includes imaging the files in the Directors office.



Project Goals

This project provides for a structured enterprise approach to the development of imaging and workflow capabilities which provides increased security and integrity of records; reduces the labor intensive record retrieval and re-filing process; expedites workflow processes through an electronic workflow management system; provides simultaneous and instant access to records; and reduces costs associated with space and shelving for storage of paper requirements.



Progress to Date

Community Education and Providers Services, Child Care Assistance and Referral program and SACC Registration are currently in production. Head Start, SACC Licensing, the Director's Office and SACC children's files were planned as Phase 3. However due to FY 2010 budget constraints Phase 3 is deferred at this time.

Project Budget

No additional funding is provided in FY 2010.

Return on Investment

imaging and workflow project increase the security of records, protect sensitive information from unauthorized access; reduce staff time required for retrieval and refining of documents; reduce processing time as workflow efforts streamline the reviews required; provide a viable, accurate documents management system for old and one-of-a-kind documents; promote telework; reduce error rates by reducing manual data entry; and decrease the space requirements for maintaining paper copies of documents.

IT0054 SYNAPS

Project Description

SYNAPS was developed for the Fairfax-Falls Church Community Services Board (CSB) to improve client tracking, client/third-party billing, enhance client demographic information, staff productivity data, and provide for compliance with the Health Insurance Portability and Accountability Act (HIPAA) of 1996.

Project Goals

An enhanced SYNAPS system upgraded to current technology specifications that include improved security technology to ensures continued data protection.

Progress to Date

Efforts in FY 2008 and FY 2009 included bringing the database and supporting application servers into current technology. Roll-out of new hardware has been base lined as an incremental just-in-time rollout so that hardware and licensing come on-line as CSB staff are trained and join usage of the system. Currently the project is upgrading SYNAPS software and architecture components in order to maintain operations and update infrastructure.

Milestones:

- Purchase 10 New Citrix Servers and Replacement Application server(s) (2) Fail-over capable Production, (1) Test/QA/Training, (1) Report – FY 2009
- Hardware Configuration, O/S and software Installation, and User Testing – FY 2009
- Deployment to Production FY 2009 FY 2010

Project Budget

FY 2008 funding of \$500,000 supports the replacement and scaling-out of application servers and introduction of a more reliable environment to meet expected growth and increased utilization with a maximum user population of 800 users. No additional funds required for FY 2010.

Return on Investment

The enhanced system provides greater system reliability and end user satisfaction. The final phase will also produce a more reliable and less labor-intensive application.



IT0059 Child Care Technology

Project Description

The Child Care Management system determines client eligibility, tracks child enrollments, and processes approximately \$3 million in monthly provider payments for the Child Care Assistance Program. The system processes over 2,500 home child care facility permits for Provider Services and connects families with child care providers participating in the Child Care Resource and Referral System, tracks current market rates for providers, and interfaces with FAMIS. This project will upgrade the software for the Child Care Management system to Windows 2003 and Oracle 10g.

Project Goals

The goal of this project is to provide up-to-date, secure technology and offer e-government services to family day care providers and centers. Additionally, this project brings OFC technoloy into compliance with DIT requirements. A .NET framework will provide a full WebCCMS suite, where providers and centers can access to their data via the web, and have the ablility to maintain their profiles, thus reducing the need for OFC staff to maintain data. OFC depends on this database to issue permits and support the Child Care Assistance and Referral program, which includes the online search for child care on the public web.

Progress to Date

This project was initiated in FY 2008. Design and environment configuration have been completed, acceptance testing and move to production is planned for the fall of 2009.

Project Budget

The FY 2008 partial funding of \$194,165 for this project was provided from the County's IT budget. The remaining funding of \$341,646 was provided by the agency. The total cost of \$535,811 will cover all necessary software, hardware and consultant services to fully implement this project. No additional funds required for FY 2010.

Return on Investment

E-government services will give providers and centers the ability to access data and maintain their profiles, reducing the need for OFC staff to maintain data. This system supports the Office for Children's permitting of family care providers and the Child Care Assistance and Referral program, and enables permiting and the processing of over \$3 milliln monthly payments to providers and centers. Upgrades avoid future cost assosicated with a non supported system. E-government services support the County's IT strategic plan.

IT0069 Integrated Housing Management System

Project Description

Housing and Community Development (HCD) deployment of a comprehensive house management system, will result in a redesign and consolidation of seventeen programs, six computer systems, six separate databases, and a host of manual processes. This effort streamlines requirements for HCD's compliance with U.S. Housing and Urban Development's (HUD) reporting structure, incorporates all HCD partnership program financial information on one technology platform, and enables project-based reporting requirements for all Public Housing Authorities. Much of the data for the new system can be automatically extracted from the existing County financial and procurement system, eliminating the need for manual data entry and reducing inaccurate data reporting and/or the omission of pertinent financial data.

Project Goals

Project goal is to automatically extract information from the existing corporate enterprise systems, eliminating manual data entry that can result in the reporting inaccuracies and omissions of pertinent financial data.

Progress to Date

Phase I which commenced in March 2007 automated postings transactions originating in Yardi to FAMIS. The initial HUD mandated modifications were completed July 2007, remaining modifications continued through December 2008. Currently phase I performs interface posting of four to six thousand transactions from Yardi to FAMIS with little human intervention including automated reconciliation and reporting. Phase II will automate posting transactions originating in FAMIS to Yardi as well as additional FAMIS to Yardi alignment functions.



Milestones:

- > HUD Mandates Completed FY 2008
- > First Integration Complete, FY 2009
- > Second Integration FY 2010

Project Budget

FY 2006 funding of \$160,000 was provided to develop an interface between the financial module of HCD management system and the County's financial and procurement system. Additional funding of \$222,500 was provided in FY 2007 to complete the interface and ensure compliance with HUD mandates. No additional funds were requested for FY 2010.

Return on Investment

The principal return on investment for this project involves savings related to staff time and improved customer

service. The implementation of this system reduces compensatory pay and overtime for staff involved in the time consuming dual-entry of financial information. Clients will receive better customer service when inquiring about payments or Housing Assistance payments they expect to receive, landlords and housing assistance clients will be able to access this information through the Web, and payments can be processed as needed, rather than a weekly batch process. Landlords who receive rental payments and clients who receive utility assistance will receive their payment in a timely manner. This project provides Housing Management staff remote access to up-to-date information which improves customer service. Furthermore, capital project expenditures will be monitored more closely by project managers, potentially decreasing the risk of overages. Each housing project and program's financial situation is monitored individually, allowing Housing Management to make more informed decisions regarding performances.

IT0075 Participant Registration System

Project Description

This project was designed to allow the Department of Community and Recreation Services (CRS) to implement a centralized, web-based participant registration and tracking system at all community centers, senior centers, and teen centers. Project goals include the implementation of standardized data collection on participants for all centers, easier registration process for participants who use

CRS centers more than once or at more than one location, ability to sort multiple data fields and develop reports for use in program development, strategic planning and improved customer service for citizens using CRS centers.

The Participant Registration System project is deferred as part of the FY 2010 Budget reduction process.

IT0085 Loan Processing System Replacement

Project Description

The Fairfax County Department of Housing and Community Development (HCD) provides loan assistance to resident homeowners under a number of County and Federally sponsored programs. These Loan programs are available to assist low-to-middle income residents in securing and maintaining affordable housing.

Project Goals

This project's goal is to replace HCD's twenty three-years old Loan Processing System with a COTS program that facilitates current loan processing and tracking need, as well as retains Mainframe connectivity to the Department of Finance functionally. Through the years both the functionality and technology associated with the existing system have become dated and the need for a more robust loan

processing system have grown. Implementing a current loan servicing system that utilizes web technology to properly account, service and report on the excess of \$46 million in loans in the HCD portfolio will allow for enhanced revenue and compliance with federally mandated HUD programs.

Progress to Date

A request for Proposal was issued in the spring of 2009.

Project Budget

FY 2009 funding for \$126,000 was provided to replace existing department of Housing and Community Developments software used for its loan processing. FY 2010 funding is not required.



Return on Investment

To address current shortcomings of the Loan Processing System, the County would need to invest substantial amount of time at an estimated cost of \$300,000 and \$500,000 in programming fees and discontinue its plan to phase out the inefficient IDMS and its associated maintenance costs. Procuring and implementing a loan servicing system that utilizes web technology is needed to properly account, service and report on the excess of \$46 million in

loans in the HCD portfolio, many of which are not captured in LPS. It also allows for enhanced revenues through the use of database matches (e.g., the Clerk of the Court, DPZ, etc.) which can enable HCD to independently determine if the conditions for loan repayment have become due. Given the large dollar amounts in our Proffer and various deferred loan programs the opportunities to enhance revenues or deter the loss of funds justify the need for this new system.





3.6 Planning and Development

IT0011.12 Comprehensive Plan/Zoning Ordinance Workflow

Project goals included the implementation of a Document Management System (DMS) to provide for an audit trail for amendments to the Comprehensive plan. The workflow component of a Document Management System saves time and reduces paper by allowing for an electronic circulation of draft staff reports, amendments, memos, letters, and other staff documents for review, editing and

approval. DPZ produces many types of documents such as paper copies for publication or distribution to the public, as well as Web pages and other electronic products.

This project is deferred as part of the FY 2010 Budget reduction process.

IT0055 Fairfax Inspection Database Online (FIDO)

Project Description

The FIDO Project involved the replacement and consolidation of several platform-specific land use management systems into a single enterprise solution that supports land use permit issuance, inspection, and code enforcement operations at five County agencies (Public Works, Planning and Zoning, Fire and Rescue, Health, and the Code Enforcement Strike Team). FIDO supports ninety different permits (building, roof, basement, restaurants, sign, sprinkler systems, fire alarms, etc.) land use complaint types (residential overcrowding, tall grass, junked cars, etc.), and also includes a web portal to allow citizens and businesses to query the status of a permit applications and code enforcement complaints.

Project Goals

The goal of the FIDO Project was to provide a single data-base solution that met the needs of multiple agencies involved in similar processes. FIDO was integrated with several other County systems (Land Development System, Integrated Assessment System, and Master Address Repository System, GIS) to provide a seamless process throughout the lifecycle of construction projects, and code enforcement management activities. Project goals also included enhancing customer service by streamlining the permitting process, and reducing permit issuance, plan review and inspection timeframes.

Progress to Date

All relevant FIDO modules (Permits, Code Enforcement, License, Customer Service, and Cashiering) are in production for DPWES, DPZ, FRD, the Health Department and the Strike Team. Other agencies such as the Department of Housing and Community Development, and the County Attorney also access FIDO on an as needed basis.

In FY 2009, the project team completed implementation of an enhanced Code Enforcement module that transformed code enforcement activities from an agency-centric module to an address-based case management module that aggregates all agency activity for a specific address in a single case. Work also continued on the development of a mobile wireless building inspection system for DPWES that will interface with FIDO. The DPWES wireless system is scheduled for implementation in 2009.

In addition, a mobile wireless FIDO pilot was launched in the Department of Planning and Zoning in February 2009 that involves the extension of the FIDO desktop to the field for up to 10 DPZ code enforcement inspectors. The pilot provides direct access to FIDO from the field through a laptop and virtual private network that allows the Inspector to interact with FIDO as if he is in the office. Initial feedback has been positive as it allows the Inspector to access and update Code Enforcement case information remotely, thereby eliminating the requirement to "drive back" to the office to perform system research and update activities. The Fire and Rescue Department and Health Department inspectors will participate in the mobile wireless pilot during the summer of 2009. Remaining project tasks include the enhancement of the FIDO web portal to allow citizens and businesses to apply for land-use permits via the Web, and the expansion of wireless technologies to support all Building and Code Enforcement field inspectors with compliance inspections, and complaints management.

Project Budget

Due to budget constraints FY 2010 funding is not available.

Return on Investment

FIDO consolidated land use data from several disparate systems into a single land use data repository that has transformed multiple agencies heterogeneous business



processes to a homogeneous presentation layer that provides accessible business intelligence to key decision makers and customers. This data repository has led to a collaborative land use management business architecture that minimizes extended 3rd party reviews and information shortfalls that have historically prolonged permit issuance and code enforcement lifecycles. Data centralization has also maximized employee productivity by providing a single point of reference that has eliminated the need for phone calls and manual processes to determine the status of permit issuance pre-requisites (i.e., Site plan, code enforcement violations, contractor licenses, etc.).

System consolidation efforts included the elimination of redundant technical infrastructure and software maintenance expenditures that will ensure system efficiencies and cost savings throughout the FIDO system lifecycle. In addition, savings are realized through a streamlined system that has enabled the land development industry to work more productively with the County thereby providing growth opportunities for County residents and businesses, that can potentially enhance tax revenues. Moreover, the e-government capabilities and collaborative agency approach to code enforcement activities provided by FIDO has established an electronic dialogue between the County and citizens to monitor and/or eliminate conditions that may negatively impact quality of life issues in Fairfax County neighborhoods.

IT0064 Proffer Database and Status System

The goal of the proposed proffer system was to provide an adaptive technical architecture to supplement Fairfax County's existing proffer business architecture, and enable the implementation of a reengineered Proffer monitoring, implementation, and fulfillment processes. The objective of PRODSS was to provide a quick response reporting tool

to summarize and display key proffer data elements in a flexible, project specific and user-friendly format.

The Proffer Database and Status System is deferred as part of FY 2010 Budget reductions.

IT0065 Facility Maintenance Management System

Project Description

This project supports the acquisition of an Integrated Facilities Management and Grounds Management System as a single, integrated facilities information resource for the Facilities Management Department (FMD) and the Fairfax County Park Authority (FCPA). An updated system will increase the effectiveness and efficiency of staff and utilization of capital resources required to maintain and manage County and Park facilities and properties. The new system will support the goals of the project through the enhancement of data collection methods and tools, improved warranty tracking, elimination of redundant facilities information databases, user friendly interfaces for customer access, and a strong reporting system.

Project Goals

The goals of this project are to acquire and implement a state of the art Computer Integrated Facilities Management (CIFM) System. FMD and FCPA hold the greatest portion of responsibility for the maintenance of County's largest and most valuable physical assets: its properties, facilities and the subsystems that keep them operational. The maintenance aspect must be fully integrated with the

management of those assets by encompassing all the functional components and activities that support Lease Management, Space Management and scheduling, Inventory Control, Grounds Management, Contracts Managements, Utilities Management, Physical Security, and Emergency Preparedness/Disaster Recovery. By implementing a web base, "one stop shop" for facilities information, we will be able to improve internal efficiencies as well as provide more accurate, completed, and timely information to customer agencies. By implementing a web base, "one stop shop" for facilities information, the County will improve internal efficiencies as well as provide more accurate, complete, and timely information to customer agencies. By consolidating the redundant facilities tables and databases maintained by various branches within FMD as well as by the participating "partner" agencies, the County will gain the benefit of more consistent data and improved interagency coordination of information.

Progress to Date

Phase I – Portfolio and Demand Maintenance – was implemented in March 2007. Implementation of Planned Maintenance, Inventory bar-coding, space management and configuration of handhelds is planned for June 2009; Real



Estate Leases module for August 2009, and Capital Projects phase by December 2009.

Project Budget

FY 2009 funding of \$188,218 supports integration services required for the completion of project milestones. FY 2010 funding is not available.

Return on Investment

Extensive saving will be realized through the streamlining of communications and processes throughout FMD and the Park Authority, the most quantifiable savings derived from time saved by field personnel (crafts, trades, and grounds personnel) and Work Control Center staff within the agencies. The replacement system will provide bar-coding and

wireless technology to greatly improve the speed and consistency of data collection necessary to better utilize field staff the elimination of excessive hand recording of information that is entered into the system at a later time and/or by a different individual. Accurate and timely data collection plays a vital role in improving time management for field staff and will ultimately work to extend the life cycle of equipment. Improved data collection in the field, along with a web based customer request and inquiry interface will save time for staff in terms of handling customers' status inquiries and work order processing from initiation to close out. With the implementation of this system, duplicate work orders, work performed by vendor for inventory that is under warranty and multiple tasks on work order will all equate to savings by cost avoidance.

IT0067 Stormwater Maintenance Management System

Project Description

This project will consolidate a number of stand-alone data-bases used for work order, complaints, and infrastructure inventory in the Maintenance and Stormwater Management Division (MSMD) into one streamlined, integrated maintenance management system. Data is currently captured in multiple, mostly stand alone, applications, some of which are in old technology programs and unable to run on a network. Most of the data is not linked, requiring repetitive input of information, which costs staff time and increases the likelihood of input error. Non-integrated data also makes it difficult to consolidate and provide information necessary to meet mandated reporting requirements.

Replacement of existing databases with an integrated system will tie together work orders, materials equipment, complaints, GIS and infrastructure inventories; allow data sharing across the agency and with partner agencies; result in better customer service by allowing residents, Board of Supervisor offices, and others easy web-based access



to information concerning complaint status, work order status, and infrastructure maintenance history by location (e.g., history of flooding at a particular site).

Project Goals

Project goals seek to increase operational efficiency by streamlining the work order, inventory tracking, and reporting processes; improve decision-making through the increased availability of pertinent information and enhanced analysis; provide synchronization of GIS data for services requests, and work orders and asset management. The project will enable cross-referencing of inventory with other GIS data layers, creating maps for work orders, and providing more detailed information to staff and customers. The reduction in manual data entry will result in fewer data entry errors and improve the quality of data. Additionally, enhanced tracking of "trouble spots" (i.e., systems or structures with recurring maintenance problems) as well as the consolidation of reporting capabilities for budget preparation and performance measurement provide further efficiencies for improved operations.

Progress to Date

The Requirements Analysis Phase for the project was completed during FY 2007. Based on the results of the Requirements Phase, FY 2008 activities included a market analysis of compatible COTS packages. During FY 2009 an existing COTS package at DPWES's Waste Water Management system was selected for modification and expansion to support the Stormwater Divisions new work order and asset tracking systems. Project is expected to be complete in FY 2010.



Project Budget

FY 2006 funding of \$335,993 supported the completion of the Projects' Requirements Analysis phase, and the remaining balance supplemented by some agency funds will support the procurement and implementation of the COTS solution. Due to budget constraints FY 2010 funding from Fund 104 is not available.

Return on Investment

The benefits of an integrated system include reduced operational costs, migration of aging legacy system to a modern database, integration of agency data, decreased reliance on preprinted forms and photocopies, an improved level of completeness and accuracy in data col-

lection efforts and improved access to information for decision making. Data is entered once at the source, and cost savings will result from the elimination of data entry redundancies existing between the present materials, daily labor time entry and work order databases. Webbased customer complaint/maintenance request and customer inquiry interface will save time for staff for handling customer's initial reporting of problems, status inquiries and work order processing from initiation to close out. In addition, the proposed system will provide public access to data in appropriate cases such as on-line complaint/maintenance requests and work order status, thereby eliminating significant call-taking functions, as well as providing customers direct access to data.

IT0077 Land Development Industry Enhancements

The customer flow management project would reduce customer wait times, use staff resources more efficiently, provide real-time and accurate workload and backlog statistics for management analysis, and improve customer service. In light of budget constraints, DPWES/LDS (Land Development Services) agreed in October 2008 to temporarily suspend the customer flow management project, but

believes firmly in the benefits of the project and the need for the implementation of a customer flow management tool in LDS.

This project is deferred as part of FY 2010 Budget reduction process.

IT0082 Land Use Information Accessibility Initiatives

Project Description

During January 2006, the Board of Supervisors established the Land Use Information Accessibility Advisory Group ("Advisory Group"). The purpose of the Advisory Group was to review the ways in which land planning and development information is made available to the public, make recommendations for accessibility improvements, and develop a high-level plan of action. The Advisory Group made a number of recommendations which were accepted by the Board of Supervisors in January 2007. See http://www.fairfaxcounty.gov/landusecomm/ for the final Advisory Group report.

Project Goals

Project goals are to improve the ability of citizen and business constituent to easily access information concerning land use planning and development activities in their communities.

Progress to Date

During FY 2007 LDSNET web page enhancements were made to provide two new inquiries; the Search Land Use

Information by Address, and the Search Land Use Information by Magisterial District. Both of these functions also supported searching by, and accessing spatial views of land development information on a map. During FY 2008 staff addressed several Advisory Group recommendations that included:

- Improving navigation between the LDSNET & GIS My Neighborhood web pages for common data elements,
- Expanding the Search by Address/Search by Magisterial District features to incorporate building permits and additional Plan types/Plan history,
- Expanding the LDSNET web page to include Site and Rezoning plan summaries in downloaded PDF files,
- Documenting requirements for citizen email notification of Site/Rezoning plan submissions, and 3D imagery tool integration for the My Neighborhood web page.



In FY 2009, 3-D web-based applications provided an enhanced web capability which allows users to view key GIS data such as parcels and road centerlines along with the 3-D models. The application enables users to incorporate and view 3-D web models available from web libraries on their local computers, and also assists user in viewing and evaluating the spatial impact of proposed land use developments. Future plans include further enhancements to the 3-D web viewer and the GIS My Neighborhood web page improvements. These include rezoning information, site plan submissions, and building permit information relevant to address-specific web inquires, as well as summary reports and GIS map displays of active land use activities along with community information concerning elected officials, school pyramids, parks and recreation facilities, and public safety locations (i.e. police and fire/ rescue stations).

Project Budget

Due to FY 2010 budget constraints additional funding is not available.

Return on Investment

The project streamlines constituent access to relevant land use information, enhances navigation and provides more intuitive and web-based visualization tools for understanding the spatial environment. These efforts exhibit Fairfax County's commitment to making land use process and information more open, inclusive, and citizen-oriented. These projects enhance citizens' awareness of land use information impacting their neighborhoods and facilitate citizen participation in the process. Information on these systems is available 24/7 on the County's website.

IT0087 ParkNet Security Upgrade

Project Description

The project is an IT hardware and software integration project to upgrade and bring ParkNet, Fairfax County Park Authority's aging business application into compliance with Payment Card Industry Standards (PCI) and replace aging hardware and operating system platforms with a County-compliant, Windows-based hardware and operating system platform to serve the Park Authority and its citizen-customers.

Project Goal

This initiative ensures conformity with current supportable IT architecture and security standards as well as compliance with the Payment Card Industry mandates for accepting credit card payments over the internet and IVR.

Project objectives include: securing the Parknet application by using County-standard tools for anti-virus protection; securing the ParkNet application from threat of environmental mishap and promoting Continuity of Operations Planning (COOP) by relocating it from the Herrity Building to the Enterprise Operations Center; increasing system availability to staff and citizens, placing the administration of the ParkNet platform under the auspices and standards of the agency's organizational unit; providing a faster application for agency staff (which benefits County citizen-customers); and eliminating the need for special DEC Alpha Cluster and Open VMS skill for Automation Services Branch staff.

Progress to Date

Procurement activities will be complete by the end of FY 2009. Software integration, installation and testing are planned for FY 2010. The project will use existing County infrastructure resources for implementation.

Project Budget

FY 2009 funding of \$179,571 was provided to address project needs collaboratively with the Fairfax County Park Authority. FY 2010 funding is not required.

Return on Investment

The ParkNet system is critical to a range of agency core functions including recreation center and golf course point of sale activities to program and camp registration via the internet and IVR portal, architecture and security standards, as well as compliance with Payment Card Industry mandates for accepting credit card payments over the internet and on the IVR. Opportunities exist for enhanced revenue because of increased uptime and availability of the ParkNet system and the Internet class registration capability. The project protects the application, agency information, and citizen information by moving the server to the County's Enterprise Operations Center (EOC), and promotes Continuity of Operations Planning (COOP) by involving County staff and resources in the protection of the data.







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